

167923	ATU029 863	ATL8C4 1758:1 376..5 01	nap					0.64	g47739 10	56	217	5.5e- 19	ate Isomer ase [1]; PUTATI VE TARTRA TE TRANSP ORTER [Agrob acteri um vitis] (AFL47 259) No defini tion line found [Arabi dopsis thalia nal]
167924	ATU029 864	ATL8C3 2664:2 451..1	nap					0.64	g45393 14, g45672 65	56, 31	452, 341	9.8e- 51, 6.5e- 33	(AL035 679) kinesi n like protei n [Arabi dopsis thalia nal]; (AC006 841) putati ve kinesi

167925	ATU029 865	ATL8C3 1020:5 48..19 63	nap				ATL8C3 1020:9 12..15 82	0.63	942630 51	56	188	8.0e- 08	n protei n [Arabi dopsis thalia na]
167926	ATU029 866	ATL8C1 0508:1 ..1419	nap				ATL8C1 0508:7 ..1195	0.62	934027 49, 944688 04	56, 48	452, 238		(AC005 142) hypoth etical protei n [Arabi dopsis thalia na]
167927	ATU029 867	ATL8C3 8600:4 41..1	nap				ATL8C3 8600:4 00..16	0.61	945444 62	56	469	7.5e- 49	(AL031 187) putati ve protei n [Arabi dopsis thalia na]; (AL035 601) putati ve protei n [Arabi dopsis thalia na]
													(AC006 580) putati

167932	ATU029 872	ATL8C3 3395:9 15..1	nap					ATL8C3 3395:9 15..1 1	0.57	940380 47	56	184	7.9e- 17	(AC005 897) hypoth etical protei n [Arabi dopsis thalia nal]	educta se [Arabi dopsis thalia nal]
167933	ATU029 873	ATL8S2 4030:4 47..49	nap					ATL8S2 4030:3 53..58	0.56	973192 8	56	310	2.2e- 29	HYPOTH ETICAL 27.4 KD PROTEI N IN HYR1 3'REGI ON [Sacch aromyc es cerevi siae]	
167934	ATU029 874	ATL8C5 427:30 49..1	nap					ATL8C5 427:30 47..11 1	0.56	922528 35	56	315	2.4e- 28	(AF013 293) No defini tion line found [Arabi dopsis thalia nal]	

167935	ATU029 875	ATL8C2 4510:1 ..1020	nap				ATL8C2 4510:9 6..100 7	0.55	g35229 46	56	1252	9.7e- 133	nal (AC004 411) putati ve cytoch rome P450 [Arabi dopsis thalia nal]
167936	ATU029 876	ATL8S6 945:61 ..350	nap				ATL8S6 945:70 ..313	0.55	g41673 1	56	344		POLLEN SPECIF IC PROTEI N C13 PRECUR SOR [Zea mays]
167937	ATU029 877	ATL8C4 2833:1 369..3 399	nap				ATL8C4 2833:1 369..3 264	0.53	g42630 60	56	1793	6.4e- 189	(AC005 142) putati ve transp oson protei n [Arabi dopsis thalia nal]
167938	ATU029 878	ATL8C4 0302:1 125..1 1	nap				ATL8C4 0302:1 111..3 3	0.53	g42630 63	56	817	2.9e- 73	(AC005 142) hypoth etical protei n [Arabi

167939	ATU029 879	ATL8C1 3829:1 096..3 77	nap				ATL8C1 3829:1 030..4 38	0.52	g36000 30	56	356	5.2e- 30	dopsis thalia na] (AF080 119) contai ns simila rity to ankyri n repeat s (Pfam: ank.hm m, score: 13.93, 14.93 and 27.78) [Arabi dopsis thalia na]
167940	ATU029 880	ATL8S2 7056:4 5..609	nap				ATL8S2 7056:4 5..334	0.52	g45394 44	56	838	5.7e- 81	(AL049 523) hypoth etical protei n [Arabi dopsis thalia na]
167941	ATU029 881	ATL8C3 7986:1 304..1	nap				ATL8C3 7986:1 131..9 2	0.52	g28327 17	56	1280	7.9e- 141	(AJ003 114) alkali ne/neu

167942	ATU029 882	ATL8C1 7638:1 634..1	nap					0.51	g22136 29	56	668	1.1e- 65	(AC000 103) F21J9. 21 [Arabi dopsis thalia na]	tral invert ase [Lolium temule ntum]
167943	ATU029 883	ATL8C1 627:44 3..1	nap					0.47	g12446 53	56	699	2.2e- 34	(U4100 0) gag gene produc t [Zea mays]	
167944	ATU029 884	ATL8C4 3020:1 ..879	nap					0.46	g45394 30	56	205	8.8e- 18	(Al049 171) putati ve protei n [Arabi dopsis thalia na]	
167945	ATU029 885	ATL8S1 0943:8 5..768	nap					0.43	g23845 64	56	907	2.8e- 90	(U7047 0) beta- ketoac yl-ACP syntha se I [Pseud	

167946	ATU029 886	ATL8S1 1563:1 ..493	nap						ATL8S1 1563:2 31..44 9	0.43	g13708 3	56	192	3.2e- 28	URE2 PROTEI N [Sacch aromyc es cerevi siae]
167947	ATU029 887	ATL8C1 1263:7 10..17 88	nap						ATL8C1 1263:1 097..8 74	0.40	g45861 13	56	955	2.5e- 54	(AL049 638) putati ve DNA- bindin g protei n [Arabi dopsis thalia na]
167948	ATU029 888	ATL8C1 3222:2 449..1 408	nap								g26739 07	56	1611	5.3e- 117	(AC002 561) hypoth etical protei n [Arabi dopsis thalia na]
167949	ATU029 889	ATL8C1 4944:1 ..1140	nap								g37243 64	56	83	0.998	(AB018 374) GARP34 [Mus muscul us]

167950	ATU029 890	ATL8C1 557:1.565	nap						g45394 49	56	855	2.0e-78	(AL049500) putative protein [Arabi dopsis thalia na]
167951	ATU029 891	ATL8C1 6247:2089..1400	nap						g28299 18	56	565	2.5e-59	(AC002291) simila r to
167952	ATU029 892	ATL8C1 6610:1..628	nap						g22449 60	56	450	1.1e-43	(Z97340) simila rity to copia- like retrot ranspo son [Arabi dopsis thalia na]
167953	ATU029 893	ATL8C1 6800:1194..172	nap						g19316 53	56	506	1.1e-43	(U95973) unknow n protei n [Arabi dopsis thalia na]
167954	ATU029 894	ATL8C1 7599:1	nap						g31282 01	56	165	1.4e-07	(AC004521)

167955	ATU029 895	ATL8C1 7611:1 796..1	nap											g36458 99	56	2927	3.5e- 274	unknown protein [Arabidopsis thaliana]
167956	ATU029 896	ATL8C2 2907:1 024..2 37	nap											g45672 95	56	919	3.9e- 93	(U68408) 5', end not determined experimentally [Zea mays] (AC006918) putative polyprotein [Arabidopsis thaliana]
167957	ATU029 897	ATL8C2 5365:3 07..18 51	nap											g34829 13	56	97	2.6e- 07	(AC003970) Similar to MtN21, [Arabidopsis thaliana]
167958	ATU029 898	ATL8C2 5690:7	nap											g45126 31	56	195	5.7e- 22	(AC004793)

167959	ATU029 899	ATL8C2 5998:2 803..1 598	nap										g15237 96	56	1036	3.2e- 95	(X9786 4) cytoch rome P450 [Arabi dopsis thalia na] []	Contai ns simila rity to [Arabi dopsis thalia na]
167960	ATU029 900	ATL8C2 6535:1 270..5 96	nap										g26959 31	56	308	8.8e- 28	(AJ222 779) hypo thetical protein [Horde um vulgar e]	
167961	ATU029 901	ATL8C2 7716:9 17..1	nap										g49268 21	56	432		(AC004 135) T17H7. 6 [Arabi dopsis thalia na]	
167962	ATU029 902	ATL8C2 9103:6 29..1	nap										g13635 28	56	1035	1.1e- 103	gag protei n -	

167963	ATU029 903	ATL8C2 9746:1 138..1	nap											g43712 92	56		323	2.6e- 35	maize [Zea mays] (AC006 260) unknown protein [Arabi dopsis thalia na]
167964	ATU029 904	ATL8C3 1973:5 92..21 9	nap											g45876 08	56		174	7.1e- 15	(AC006 951) putati ve polyga lactur onase [Arabi dopsis thalia na]
167965	ATU029 905	ATL8C3 2632:1 385..6 79	nap											g26233 06	56		387	8.3e- 48	(AC002 409) unknown protein [Arabi dopsis thalia na]
167966	ATU029 906	ATL8C3 4363:1 782..9 64	nap											g45570 64	56		41	0.991	(AC007 045) hypoth etical protein

167970	ATU029 910	ATL8C4 2379:1 332..1	nap										g22449 16	56	635	3.3e- 61	(Z9733 9) hypoth etical protei n [Arabi dopsis thalia na]
167971	ATU029 911	ATL8C4 4375:1 ..684	nap										g45126 50	56	156	1.3e- 12	(AC007 048) hypoth etical protei n [Arabi dopsis thalia na]
167972	ATU029 912	ATL8C4 5071:6 306..1 0425	nap										g45443 71	56	321	4.4e- 32	(AC006 920) hypoth etical protei n [Arabi dopsis thalia na]
167973	ATU029 913	ATL8C4 5199:6 74..67	nap										g48679 34	56	504	3.2e- 44	(AB008 676) histid inol-

167974	ATU029 914	ATL8C4 5219:1 891..6 49	nap										g35496 26	56	846	4.6e- 84	(AJ009 696) wall- associ- ated kinase 1 [Arabi dopsis thalia na]	phosphatase and imidazoleglycerol-phosphate dehydratase [Escherichia coli]
167975	ATU029 915	ATL8C4 5429:9 06..31 71	nap										g31282 31	56	413	4.8e- 44	(AC004 077) hypothetical protein [Arabi dopsis thalia na]	
167976	ATU029 916	ATL8C4 7698:7 49..13 99	nap										g24594 28	56	175	2.9e- 09	(AC002 332) unknown protein	

167984	ATU029 924	ATL8S1 9632:3 63..1	nap									g13393 9	56	213	5.1e- 18	similarity to Arabidopsis thaliana reverse- transcriptase-like proteins [Arabidopsis thaliana]
167985	ATU029 925	ATL8S2 0256:1 ..396	nap									g11750 83	56	339	9.8e- 21	HYPOTHETICAL PROTEIN N HI0056 [Haemophilus influenzae Rd]
167986	ATU029	ATL8S2	nap									g38613	56	115	3.3e-	(AJ235

167987	926	0787:4 60..92									41						06	273) MAF PROTEI N (maf) [Ricke ttsia prowaz ekii]
	ATU029 927	ATL8S2 2222:5 01..1	nap								g41848 3	56	229				4.5e- 20	HYPOTH ETICAL 31.2 KD PROTEI N IN GLNA- RBN INTERG ENIC REGION [Esche richia coli]
167988	ATU029 928	ATL8S2 5234:5 16..1	nap								g43758 34	56	495				2.6e- 20	(AL021 713) putati ve protei n [Arabi dopsis thalia nal
167989	ATU029 929	ATL8S2 6451:4 54..35	nap								g11762 69	56	179					HYPOTH ETICAL 27.7 KD PROTEI N IN BIOH-

167997	ATU029 937	ATL8C1 3016:1 1829.. 11482	nap							g31842 87	56	258	8.6e- 18	dopsis thalia nal (AC004 136) revers e- transc riptas e-like protei n [Arabi dopsis thalia nal]
167998	ATU029 938	ATL8C1 6631:3 84..16 34	nap						ATL8C1 6631:3 84..16 34	0.99	55	139	1.7e- 15	(AC002 131) Simila r to style develo pment- specif ic protei n 9612 precu sor gb X55 193 and pectat e lyase P59 precu sor gb X15 499

167999	ATU029 939	ATL8C1 0350:1 58..10 78	nap					ATL8C1 0350:1 58..10 78	0.99	g33353 59	55	838			(AC003 028) unknown protein [Arabi dopsis thalia na]	from Lycoper rsicon esculen tum. [Arabi dopsis thalia na]
168000	ATU029 940	ATL8S2 9835:1 ..446	nap					ATL8S2 9835:3 3..446	0.98	g24945 62	55	418	3.2e- 30		FLAGEL LAR BIOSYN THETIC PROTEI N FLIP [Caulo bacter cresce ntus]	
168001	ATU029 941	ATL8C9 464:1. .624	nap					ATL8C9 464:12 4..624	0.98	g45389 93	55	308	3.9e- 31		(AL049 481) putati ve host respon se protein [Arabi dopsis	

168002	ATU029 942	ATL8C2 6540:1 066..1	nap				ATL8C2 6540:1 017..1 25	0.98		g43097 51	55	836	1.4e- 74	thalia na] (AC006 217) hypoth etical protei n [Arabi dopsis thalia na]
168003	ATU029 943	ATL8C4 1262:9 86..15 0	nap				ATL8C4 1262:6 63..15 0	0.98		g28945 64	55	659	1.0e- 69	(AL021 890) putati ve protei n [Arabi dopsis thalia na]
168004	ATU029 944	ATL8C2 6650:9 2..119 0	nap				ATL8C2 6650:9 2..682	0.97		g42637 73	55	1936	4.4e- 189	(AC006 218) hypoth etical protei n [Arabi dopsis thalia na]
168005	ATU029 945	ATL8S9 492:1. .542	nap				ATL8S9 492:16 3..496	0.96		g44686 99	55	312	1.6e- 17	(AL035 591) putati ve integr al membra ne

168006	ATU029 946	ATL8C1 6069:1 ..424	nap						ATL8C1 6069:5 1..366	0.96		g35229 35	55	594	6.2e- 57	export protei n [Strep tomyce s coelic olor]
168007	ATU029 947	ATL8S1 158:50 6..1	nap						ATL8S1 158:25 3..36	0.95		g48862 86	55	172	1.9e- 16	(AC004 411) putati ve alcohol dehydr ogenase [Arabi dopsis thalia na]
168008	ATU029 948	ATL8C2 8558:6 8..758	nap						ATL8C2 8558:1 52..29 2	0.94		g42630 51	55	94	1.0e- 05	(AL050 300) putati ve protei n [Arabi dopsis thalia na]
																(AC005 142) hypoth etical protei n [Arabi dopsis thalia

168009	ATU029 949	ATL8C4 6111:1 ..1492	nap				ATL8C4 6111:1 37..11 41	0.94	g30803 84	55	1692	2.9e- 153	na] (AL022 603) serine /threo nine protei n kinase [Arabi dopsis thalia na]
168010	ATU029 950	ATL8C1 6810:3 349..1	nap				ATL8C1 6810:3 349..4 8	0.93	g42638 22	55	1025	2.3e- 90	(AC006 067) putati ve recept or protei n kinase [Arabi dopsis thalia na]
168011	ATU029 951	ATL8C1 9265:1 ..1005	nap				ATL8C1 9265:2 36..93 5	0.93	g45672 47	55	527	5.8e- 49	(AC007 070) unknow n protei n [Arabi dopsis thalia na]
168012	ATU029 952	ATL8C4 7783:1 ..1272	nap				ATL8C4 7783:4 5..127 2	0.91	g32506 74	55	768	6.2e- 78	(AL024 486) putati ve

168013	ATU029 953	ATL8C3 081:12 62..1	nap					ATL8C3 081:11 23..73	0.89	g45860 66	55	1482	1.1e- 143	(AC006 194) putati ve pol ypyr otein, 3, partia l [Arabi dopsis thalia nal]
168014	ATU029 954	ATL8C3 1258:1 ..530	nap					ATL8C3 1258:8 ..530	0.89	g24955 84	55	190	4.6e- 17	HYPOTH ETICAL 20.4 KD PROTEI N IN MUKB- ASPC INTERG ENIC REGION [Esche richia coli]
168015	ATU029 955	ATL8C4 5525:4 12..12 52	nap					ATL8C4 5525:4 51..11 04	0.88	g42635 49	55	1328	3.8e- 135	(AC006 250) putati ve En/Spm transp oson

168016	ATU029 956	ATL8C1 1620:1 ..1056	nap					ATL8C1 1620:3 21..10 56	0.87		g30803 89	55	450	3.7e- 37	hypothetical protein 1 [Arabi dopsis thaliana]
168017	ATU029 957	ATL8C1 481:14 51..1	nap					ATL8C1 481:11 85..46	0.86		g44159 12	55	1162	1.0e- 108	(AL022603) putative membrane associated protein [Arabi dopsis thaliana]
168018	ATU029 958	ATL8S2 0745:3 9..526	nap					ATL8S2 0745:3 9..512	0.86		g31705 70	55	244	4.5e- 21	(AC006282) putative protease [Arabi dopsis thaliana]
															(AF058302) FrnE [Streptomyces roseofulvus]

168019	ATU029 959	ATL8C7 :2874. .1349	nap				ATL8C7 :2636. .1458	0.85	g28945 72	55	1106	6.7e- 67	(AL021 890) calciu m- depend ent protei n kinase - like protei n [Arabi dopsis thalia na]
168020	ATU029 960	ATL8C4 2249:6 75..1	nap				ATL8C4 2249:6 75..24 4	0.85	g45811 52	55	71	2.2e- 05	(AC006 919) hypoth etical protei n [Arabi dopsis thalia na]
168021	ATU029 961	ATL8C8 126:50 ..2560	nap				ATL8C8 126:50 ..2520	0.85	g22447 81	55	756	2.4e- 89	(Z9733 5) hypoth etical protei n [Arabi dopsis thalia na]
168022	ATU029 962	ATL8C1 8468:7 5..106 2	nap				ATL8C1 8468:2 66..10 31	0.85	g28275 55	55	551	4.4e- 51	(AL021 635) Transl ation

168023	ATU029 963	ATL8C4 1470:2 904..1	nap							ATL8C4 1470:2 778..1 22	0.84	g42063 06, g43780 66	55, 40	1127, 1138	7.7e- 112, 2.1e- 121	factor EF-1 alpha - like protei n [Arabi dopsis thalia na]
168024	ATU029 964	ATL8C3 579:1. .1563	nap							ATL8C3 579:79 ..1524	0.84	g42638 30	55	1249	2.5e- 88	(AF049 110) prpol [Zea mays]; (AF098 806) polypr otein [Sorgh um bicolo r]
168025	ATU029 965	ATL8C2 5113:1 ..1472	nap							ATL8C2 5113:1 75..14 72	0.83	g16528 92	55	590	3.3e- 47	(AC006 067) hypoth etical protei n [Arabi dopsis thalia na]
																(D9090 9) ABC transp orter [Synec hocyst is

168026	ATU029 966	ATL8C1 4609:8 57..1	nap				ATL8C1 4609:6 41..17 5	0.82		g22450 34	55	419	3.7e- 22	sp.] (Z9734 2) enoyl- CoA hydrat ase [Arabi dopsis thalia nal]
168027	ATU029 967	ATL8C4 1450:1 887..6 09	nap				ATL8C4 1450:1 507..1 074	0.82		g32427 13	55	823	9.0e- 55	(AC003 040) putati ve transp osase [Arabi dopsis thalia nal]
168028	ATU029 968	ATL8C4 2459:1 580..3 90	nap				ATL8C4 2459:1 465..3 90	0.82		g30154 88	55	932	1.4e- 98	(U5847 4) recept or- like protei n kinase [Lycop ersico n escule ntum]
168029	ATU029 969	ATL8C3 4563:2 613..1	nap				ATL8C3 4563:2 580..1 175	0.81		g45811 10	55	2212	1.0e- 234	(AC005 825) putati ve retrot ranspo

														son polypr otein [Arabi dopsis thalia na]
168030	ATU029 970	ATL8C2 6693:9 75..1	nap					ATL8C2 6693:6 80..12 5	0.81	g30045 64	55	414	2.6e- 40	(AC003 673) putati ve recept or Ser/Th r protei n kinase [Arabi dopsis thalia na]
168031	ATU029 971	ATL8C2 6611:1 385..6 76	nap					ATL8C2 6611:1 334..8 64	0.81	g29814 75	55	626	2.2e- 65	(AF053 084) putati ve cinnam yl alcohol dehydr ogenas e [Malus domest ica]
168032	ATU029 972	ATL8C1 0091:9 5..935	nap					ATL8C1 0091:9 5..830	0.81	g16540 34	55	125	(Z8136 0) hypoth etical	

168033	ATU029 973	ATL8C1 9259:8 28..1	nap						ATL8C1 9259:8 28..45 4	0.79	g38941 64	55	828	3.0e- 72	protei n Rv1732 c [Mycob acteri um tuberc ulosis]
168034	ATU029 974	ATL8S2 0229:4 77..1	nap						ATL8S2 0229:4 77..31	0.79	g40005 3	55	243	4.8e- 23	DIHYDR OXY- ACID DEHYDR ATASE (DAD) [Clost ridium pasteu rianum]
168035	ATU029 975	ATL8C3 58:303 5..231	nap						ATL8C3 58:298 4..231	0.78	g41538 73, g13514 21	55, 50	188, 188	5.6e- 17, 2.2e- 16	(AC004 918) simila r to weel- like

168041	ATU029 981	ATL8C1 5145:1 459..1	nap							ATL8C1 5145:1 160..1 46	0.75	g45389 84	55	895	3.3e- 99	(AL049 487) putati ve protei n [Arabi dopsis thalia na]	Taml transp oson of Antirr hinum majus [Arabi dopsis thalia na]
168042	ATU029 982	ATL8C3 0338:1 569..3 274	nap							ATL8C3 0338:1 569..3 242	0.73	g28282 84	55	885	1.1e- 71	(AL021 687) hypoth etical protei n [Arabi dopsis thalia na]	(AL021 687) hypoth etical protei n [Arabi dopsis thalia na]
168043	ATU029 983	ATL8C4 4161:9 43..29 63	nap							ATL8C4 4161:9 43..29 33	0.73	g35229 37	55	955	3.3e- 82	(AC004 411) unknow n protei n [Arabi dopsis. thalia	(AC004 411) unknow n protei n [Arabi dopsis. thalia

168044	ATU029 984	ATL8C1 6590:2 088..1	nap				ATL8C1 6590:1 519..1 16	0.73	g41917 79	55	302	5.1e- 15	na] (AC005 917) putati ve recA protei n [Arabi dopsis thalia na]
168045	ATU029 985	ATL8C4 4762:1 85..65 7	nap				ATL8C4 4762:2 86..65 1	0.72	g45393 59	55	205	1.5e- 19	(AL049 525) putati ve protei n [Arabi dopsis thalia na]
168046	ATU029 986	ATL8C3 7005:1 ..854	nap				ATL8C3 7005:5 75..75 4	0.71	g31282 07	55	507		(AC004 077) hypoth etical protei n [Arabi dopsis thalia na]
168047	ATU029 987	ATL8S1 3546:4 95..1	nap				ATL8S1 3546:4 34..42	0.71	g47340 02	55	643	5.8e- 63	(AC007 187) putati ve pol ypr otein [Arabi dopsis

168048	ATU029 988	ATL8C9 834:11 4..207 9	nap					ATL8C9 834:11 4..119 7	0.71	g33778 31	55	811	7.5e- 79	thalia nal (AF075 598) simila r to maize transp oson MuDR mudrA (GB:M7 6978) [Arabi dopsis thalia nal]
168049	ATU029 989	ATL8C1 4016:6 06..96 6	nap					ATL8C1 4016:6 06..75 0	0.69	g30627 91	55	98	1.0e- 06	(AB010 433) Lipid transf er protei n [Brass ica rapa]
168050	ATU029 990	ATL8C2 0655:1 ..657	nap					ATL8C2 0655:5 4..619	0.68	g16661 31	55	181	2.1e- 12	(Z8209 8) hypoth etical protei n Rv3529 c [Mycob acteri um tuberc ulosis]

168051	ATU029 991	ATL8C1 2007:1 973..6 747	nap				ATL8C1 2007:1 973..6 747	0.68	g44552 32	55	1429	2.5e- 142	J (AL035 523) putati ve protei n [Arabi dopsis thalia na]
168052	ATU029 992	ATL8C1 0119:6 88..1	nap				ATL8C1 0119:6 88..25 0	0.68	g30803 56	55	509		(AL022 580) hypoth etical protei n [Arabi dopsis thalia na]
168053	ATU029 993	ATL8C1 559:1. .961	nap				ATL8C1 559:58 ..745	0.67	g21301 22	55	694	8.5e- 58	cyclin III - maize [Zea mays]
168054	ATU029 994	ATL8C2 612:10 50..24 53	nap				ATL8C2 612:11 08..24 53	0.67	g33778 34	55	1473	2.0e- 77	(AF075 598) No defini tion line found [Arabi dopsis thalia na]
168055	ATU029 995	ATL8S2 8152:5 7..520	nap				ATL8S2 8152:8 3..520	0.67	g22931 61	55	62	9.1e- 05	(AF008 220) ytkD

168056	ATU029 996	ATL8C4 5740:1 ..3183	nap						ATL8C4 5740:6 0..293 8	0.67	g45220 05	55	2217	2.9e- 211	[Bacil lus subtil is] (AC007 069) putati ve revers e transc riptas e [Arabi dopsis thalia na]
168057	ATU029 997	ATL8C1 4329:1 ..1941	nap						ATL8C1 4329:3 14..19 29	0.66	g21911 95, g25650 08	55, 46	1673, 1031	2.1e- 152, 2.4e- 100	(AF007 271) contai ns simila rity to T. cruzi 3' end fragme nt (PID:g 161956) [Arabi dopsis thalia na]; (AC002 983) hypoth etical protei

168058	ATU029 998	ATL8C8 049:84 0..131 2	nap					ATL8C8 049:87 1..129 2	0.65	g22448 19	55	401	1.2e- 31	(Z9733 6) germin type 2 [Arabi dopsis thalia na]
168059	ATU029 999	ATL8S7 946:1. .657	nap					ATL8S7 946:20 ..606	0.65	g34174 27	55	58	0.99	(AL031 262) hypoth etical protei n [Schiz osacch aromyc es pombe]
168060	ATU030 000	ATL8C9 483:1. .2155	nap					ATL8C9 483:79 4..210 5	0.65	g47738 94	55	1335	5.2e- 140	(AF076 243) hypoth etical protei n [Arabi dopsis thalia na]
168061	ATU030 001	ATL8C4 3633:1 ..737	nap					ATL8C4 3633:7 5..737	0.64	g43888 26	55	364		(AC006 528) hypoth etical protei n

168062	ATU030 002	ATL8S2 2619:6 07..1	nap					ATL8S2 2619:5 19..11	0.64	g26219 95	55	648	2.3e- 56	[Arabi dopsis thalia nal] (AE000 865) conser ved protei n [Metha nobact erium thermo autotr ophicu m]
168063	ATU030 003	ATL8C3 3922:1 ..735	nap					ATL8C3 3922:4 4..731	0.64	g41604 02	55	451		(AJ132 240) eukary otic transl ation initia tion factor 5 [Zea mays]
168064	ATU030 004	ATL8C9 888:24 1..205 5	nap					ATL8C9 888:29 0..134 5	0.64	g40380 66	55	343	8.6e- 20	(AC005 897) hypoth etical protei n [Arabi dopsis thalia nal]
168065	ATU030	ATL8S1	nap					ATL8S1	0.63	g11813	55	271	3.2e-	SERINE

	005	3964:6 2..514					3964:4 51..70	5				21	ACETYL TRANSF ERASE (SAT) [Esche richia Coli]
168066	ATU030 006	ATL8C4 2394:7 92..1	nap				ATL8C4 2394:7 42..70	0.63	g34829 14	55	320	3.4e- 12	(AC003 970) Simila r to noduli ns and lipase [Arabi dopsis thalia na]
168067	ATU030 007	ATL8C1 6066:1 ..1331	nap				ATL8C1 6066:3 3..122 3	0.63	g35496 26	55	811	1.1e- 80	(AJ009 696) , wall- associ ated kinase 1 [Arabi dopsis thalia na]
168068	ATU030 008	ATL8C4 1654:1 ..682	nap				ATL8C4 1654:1 33..67 6	0.63	g43888 20	55	66	3.5e- 05	(AC006 528) putati ve myb DNA- bindin g protei n [Arabi dopsis

168069	ATU030 009	ATL8S4 809:1. .557	nap				ATL8S4 809:63 ..329	0.63	g24438 76	55	811	3.1e- 34	thalia na] (AC002 294) Hypoth etical protei n [Arabi dopsis thalia na]
168070	ATU030 010	ATL8C3 640:21 30..1	nap				ATL8C3 640:20 38..6	0.62	g45389 01	55	1489	2.4e- 145	(AL049 482) RNA- direct ed DNA polyme rase- like protei n [Arabi dopsis thalia na]
168071	ATU030 011	ATL8C2 8852:1 522..2 253	nap				ATL8C2 8852:1 614..2 143	0.61	g47551 89	55	825	1.6e- 63	(AC007 018) putati ve cytoch rome P450 [Arabi dopsis thalia na]
168072	ATU030 012	ATL8C2 2528:2 749..1	nap				ATL8C2 2528:1 397..1	0.61, 0.94	g44163 01	55	1754	4.2e- 140	(AF105 716) gag

168073	ATU030 013	ATL8C4 6308:1 ..1400	nap					0.60	g35496 26	55	1158	6.9e- 120	(AJ009 696) wall- associ- ated kinase 1 [Arabi dopsis thalia na]
168074	ATU030 014	ATL8C4 0462:9 23..1	nap					0.59	g21296 98	55	513	1.0e- 48	protei n kinase ATN1 (EC 2.7.1. -) - Arabid opsis thalia na [Arabi dopsis thalia na]
168075	ATU030 015	ATL8C2 1728:2 741..1 06	nap					0.59	g46801 80	55	1241	3.0e- 118	(AF111 709) polypr oteins [Oryza sativa subsp. indica]

168076	ATU030 016	ATL8C3 4273:1 ..2156	nap				ATL8C3 4273:3 72..21 03	0.58	g47411 95	55	1346	4.1e- 108	(AL049 746) ABC transp orter- like protei n [Arabi dopsis thalia na]
168077	ATU030 017	ATL8C4 462:20 23..1	nap				ATL8C4 462:18 95..56 0	0.58	g29247 77	55	665	1.4e- 66	(AC002 334) putati ve recept or protei n kinase [Arabi dopsis thalia na]
168078	ATU030 018	ATL8C1 9588:1 126..2 868	nap				ATL8C1 9588:1 430..2 603	0.58	g47739 08	55	1582	1.2e- 155	(AF147 259) No defini tion line found [Arabi dopsis thalia na]
168079	ATU030 019	ATL8C3 6949:1 ..663	nap				ATL8C3 6949:1 97..66 3	0.56	g18711 96	55	448	5.8e- 44	(U9043 9) GMP kinase isolog

168080	ATU030 020	ATL8C2 936:10 45..26 12	nap					ATL8C2 936:10 45..21 52	0.56	g41153 63	55	1344	8.8e- 106	(AC005 957) putati ve diseas e resist ance protei n [Arabi dopsis thalia na]
168081	ATU030 021	ATL8C4 4413:1 ..1945	nap					ATL8C4 4413:1 44..19 45	0.56	g33193 60	55	1505	7.0e- 169	(AF077 408) contai ns simila rity to Vicia faba retrot ranspo son- like gene (GB:AB 007467) [Arabi dopsis thalia na]
168082	ATU030	ATL8C1	nap					ATL8C1	0.55	g19316	55	620	5.4e-	(U9597

022	4376:1 ..1489					4376:1 86..11 76	50	66	3) diseas e resist ance protei n RPM1 isolog [Arabi dopsis thalia na]
168083	ATU030 023	ATL8C4 7015:1 040..1	nap			ATL8C4 7015:9 44..27 7	0.55 g17234 48	196 2.1e- 27	55 HYPOTH ETICAL PROTEI N C56F8. 17C IN CHROMO SOME I [Schiz osacch aromyc es pombe]
168084	ATU030 024	ATL8C4 1415:3 404..1	nap			ATL8C4 1415:1 96..40 , ATL8C4 1415:3 078..7 57	0.54, 0.42 g42638 31	0.0 3268	(AC006 067) putati ve revers e transc riptas e [Arabi dopsis thalia na]
168085	ATU030 025	ATL8C2 6058:1	nap			ATL8C2 6058:1	0.54 g48352 24	516 2.1e- 41	(AL049 862)

		407..9 5							407..9 7							protei n kinase ATN1 like protei n [Arabi dopsis thalia na]
168086	ATU030 026	ATL8S2 5923:1 ..685	nap						ATL8S2 5923:6 2..608	0.53	g23927 65	55	625	3.9e- 60	(AC002 534) hypoth etical protei n [Arabi dopsis thalia na]	
168087	ATU030 027	ATL8C3 2173:1 ..1186	nap						ATL8C3 2173:8 1..607	0.52	g45080 76	55	271	3.1e- 25	(AC005 882) 55659 [Arabi dopsis thalia na]	
168088	ATU030 028	ATL8C3 9894:8 57..1	nap						ATL8C3 9894:6 38..35 1	0.52	g28646 12	55	252	1.5e- 23	(AL021 811) L- ascorb ate peroxi dase - like protei n [Arabi dopsis thalia na]	

168089	ATU030 029	ATL8C5 0199:9 5..168 9	nap				ATL8C5 0199:2 35..74 0	0.52	g27603 18	55	715	1.1e- 69	(AC002 130) F1N21. 2 [Arabis dopsis thaliana na]
168090	ATU030 030	ATL8C4 9654:5 21..1	nap				ATL8C4 9654:4 24..41	0.52	g33348 09	55	473	1.2e- 46	(AL031 107) iron- sulfur oxidor educta se beta subunit [Strep tomyces coelic olor]
168091	ATU030 031	ATL8C3 5357:2 596..3 36	nap				ATL8C3 5357:2 522..3 36	0.51	g29613 49	55	2449	1.9e- 248	(AL022 140) LTR retrot ranspo son like protei n [Arabis dopsis thaliana na]
168092	ATU030 032	ATL8C4 1434:7	nap				ATL8C4 1434:4	0.50	g34452 10	55	940	2.9e- 88	(AC004 786)

168093	ATU030 033	38..1	nap				64..11 9	0.50	g48369 29, g43097 63	55, 31	523, 160	8.1e- 79, 9.2e- 14	putative flavonol 3-O- glucosyl transferase [Arabidopsis thaliana] (AC006085) Hypothetical protein n [Arabidopsis thaliana] na]; (AC006217) putative retrotransposon polyprotein [Arabidopsis thaliana] na]
168094	ATU030 034	ATL8C3 1126:1 312..1	nap				ATL8C3 4816:1 8005.. 15254	0.47	g42635 22	55	431	1.0e- 42	(AC004044) hypothetical

168095	ATU030 035	ATL8C4 9255:1 068..1	nap					ATL8C4 9255:1 056..1 9	0.47	g45860 49	55	715	7.9e- 70	prote n [Arabi dopsis thalia na]
168096	ATU030 036	ATL8S1 6879:1 ..492	nap					ATL8S1 6879:4 8..492	0.46	g39160 25	55	336	2.5e- 30	HYPOTH ETICAL 24.9 KD PROTEI N IN TRMU- ICDA INTERG ENIC REGION [Esche richia coli]
168097	ATU030 037	ATL8C3 452:18 40..13 47	nap					ATL8C3 452:17 46..13 47	0.46	g10089 04	55	626	6.5e- 60	(L4309 4) xylogl ucan endotr ansgly cosyla se [Tropa eolum

168102	ATU030 042	ATL8S2 2121:1 ..325	nap					ATL8S2 2121:1 08..32 5	0.44	g17229 66	55	205	7.7e- 16	thalia nal HYPOTH ETICAL 20.7 KD PROTEI N CY373. 34C [Mycob acteri um tuberc ulosis]
168103	ATU030 043	ATL8S1 2587:5 31..17	nap					ATL8S1 2587:4 81..20 6	0.44	g48870 85	55	387	5.0e- 30	(AF125 564) putati ve ADP- heptos e synthe tase [Neiss eria mening itidis]
168104	ATU030 044	ATL8C3 4240:9 ..1361	nap					ATL8C3 4240:5 4..127 6	0.43	g46801 80	55	1162	1.1e- 101	(AF111 709) polypr otein [Oryza sativa subsp. indica]
168105	ATU030	ATL8C8	nap					ATL8C8	0.42	g45396	55	203	7.2e-	(AF061

	045	199:1. .999						199:41 7..608	64				13	282) hypoth etical protei n [Sorgh um bicolo r]
168106	ATU030 046	ATL8C1 6435:2 138..1	nap					ATL8C1 6435:2 138..2 70	0.41	g27393 09	55	2288	3.9e- 157	(Y1599 0) P- glycop rotein -like protei n [Arabi dopsis thalia na]
168107	ATU030 047	ATL8C4 1810:4 53..1	nap					ATL8C4 1810:4 53..12 3	0.40	g41851 47	55	433	2.8e- 43	(AC005 724) hypoth etical protei n [Arabi dopsis thalia na]
168108	ATU030 048	ATL8S1 5404:1 ..559	nap							g73238 4	55	214	9.5e- 11	HYPOTH ETICAL 37.0 KD PROTEI N IN SPOIIR -GLYC INTERG ENIC

168109	ATU030 049	ATL8C2 2419:7 40..11 79	nap								g47739 10	55	308	2.1e- 24	REGION [Bacil lus subtil is] (AF147 259) No defini tion line found [Arabi dopsis thalia na]
168110	ATU030 050	ATL8C2 4779:2 36..15 06	nap								g11719 79	55	736	4.5e- 87	POLYAD ENYLAT E- BINDIN G PROTEI N 5 (POLY (A) BINDIN G PROTEI N 5) (PABP 5) [Arabi dopsis thalia na]
168111	ATU030 051	ATL8C2 5092:1 ..868	nap								g15024 30	55	1319	5.0e- 135	(U6233 1) phosph ate transp

168112	ATU030 052	ATL8S1 2970:5 67..1	nap										g19163 10	55	621	5.0e- 61	(U9163 2) gguC [Agrob acteri um tumefa ciens]	orter [Arabi dopsis thalia na]
168113	ATU030 053	ATL8C4 4668:1 76..48 0	nap										g59578 0	55	241	2.0e- 19	(U1387 1) lacZ alpha peptid e [Cloni ng vector j]	
168114	ATU030 054	ATL8C4 2992:9 22..1	nap										g47339 58	55	111	0.0012	(AC007 294) unknow n protei n [Arabi dopsis thalia na]	
168115	ATU030 055	ATL8C8 736:67 3..788	nap										g22244	55	119	2.5e- 06	(X0026 3) uniden tified readin g frame	

168120	ATU030 060	ATL8C5 :1809. .1372	nap								g47739 10	55	195	1.2e- 17	ne prote n from Beta vulgar is and a member of sugar transp orter family PF1000 83. [Arabi dopsis thalia na]
168121	ATU030 061	ATL8C1 0868:1 924..6 63	nap								g44670 95	55	650	4.7e- 52	(AL035 538) putati ve protei n [Arabi dopsis thalia na]

168122	ATU030 062	ATL8C4 3633:2 899..1 116	nap				ATL8C4 3633:2 890..1 116	1.00	g36950 59	54	862	(AF064 787) rac GTPase activa ting protei n 1 [Lotus japoni cus]
168123	ATU030 063	ATL8S1 3832:6 04..1	nap						g11693 93	55	105	5.9e- 06 DNA POLYME RASE III, BETA CHAIN [Haemo philus influe nzae Rd]
168124	ATU030 064	ATL8C1 4402:1 554..3 303	nap						g36680 95	55	188	(AC004 667) hypoth etical protei n [Arabi dopsis thalia na]
168125	ATU030 065	ATL8C2 4383:1 018..7 12	nap						g43098 65	55	121	(AC006 527) hypoth etical protei n [Arabi dopsis

168134	ATU030 074	ATL8C1 903:32 5..870	nap										g45861 00	55	839	1.3e- 72	predic ted protei ns (GB:AF 025472 , AF0406 4 and AF0262 12) [Arabi dopsis thalia na]
168135	ATU030 075	ATL8C3 9414:1 ..430	nap										g25586 58	55	330	3.6e- 32	(AC002 354) No defini tion line found [Arabi dopsis thalia na]
168136	ATU030 076	ATL8S8 69:1.. 638	nap										g42636 44	55	560	2.6e- 58	(AC006 136) putati ve

168137	ATU030 077	ATL8C2 3010:1 576..1	nap										g25650 07	55	2369	2.7e- 182	(AC002 983) predic ted transp oson protei n [Arabi dopsis thalia na]
168138	ATU030 078	ATL8C4 5523:1 305..2 65	nap										g23427 25	55	516	6.1e- 50	(AC002 341) hypo thetical protei n [Arabi dopsis thalia na]
168139	ATU030 079	ATL8S2 6659:3 83..17	nap										g18990 58	55	222	(U7737 8) transc riptio nal activa tor CBF1 [Arabi dopsis	

168144	ATU030 084	ATL8C3 4892:2 618..1 042	nap							917070 18	55	340	3.0e- 31	n [Arabi dopsis thalia na] (U7872 1) CutA isolog [Arabi dopsis thalia na]
168145	ATU030 085	ATL8C3 3917:2 627..1	nap							933193 60	55	1755		(AF077 408) contai ns simila rity to Vicia faba retrot ranspo son- like gene (GB:AB 007467) [Arabi dopsis thalia na]
168146	ATU030 086	ATL8S2 4377:1 ..338	nap							945443 88	55	517	8.1e- 44	(AC007 047) hypo thetical protei n

168151	ATU030 091	ATL8C3 2428:1 705..6 43	99..99	nap									g35402 05	55	170	6.5e- 12	(AC004 260) Hypoth etical protei n [Arabi dopsis thalia na]	putati ve revers e- transc riptas e protei n [Arabi dopsis thalia na]
168152	ATU030 092	ATL8S1 5874:3 89..1		nap									g13391 7	55	182	3.9e- 14	CHLORO PLAST 30S RIBOSO MAL PROTEI N S2 [Nicot iana tabacu m]	
168153	ATU030 093	ATL8C2 1158:9 18..1		nap									g27813 51	55	466	2.5e- 46	(AC003 113) F24O1. 7 [Arabi dopsis	

168159	098	5605:3 21..45 3																	05	etical protei n 87 - common tobacc o chloro plast [Nicot iana tabacu m]
	ATU030 099	ATL8C2 2499:1 ..560	nap																6.4e- 18	(AC002 521) putati ve membra ne protei n [Arabi dopsis thalia na]
168160	ATU030 100	ATL8C3 0747:3 25..27 63	nap																3.4e- 173	(AF077 408) contai ns simila rity to Vicia faba retrot ranspo son- like gene (GB:AB 007467

168161	ATU030 101	ATL8S2 1334:6 13..1	nap					ATL8S2 1334:5 48..95	0.98	g40990 30	54	246	8.0e- 26	(U8208 4) integr ase [bacte rioph ge SfX]
168162	ATU030 102	ATL8C4 9352:1 059..2 93	nap					ATL8C4 9352:4 17..29 3	0.98	g24594 20	54	190	1.1e- 13	(AC002 332) putati ve riboso mal protei n L17 [Arabi dopsis thalia na]
168163	ATU030 103	ATL8C1 1821:1 014..3 82	nap					ATL8C1 1821:9 15..38 2	0.98	g48742 73	54	473	4.0e- 50	(AC007 354) Simila r to []
168164	ATU030 104	ATL8C4 7736:1 ..2107	nap					ATL8C4 7736:2 42..19 20	0.97	g22311 75	54	748	5.4e- 71	(U4405 0) mis5p [Xenop us laevis]
168165	ATU030 105	ATL8C1 769:15 22..90	nap					ATL8C1 769:13 15..90	0.96	g38057 63	54	962	8.6e- 92	(AC005 693) hypoth

168166	ATU030 106	0	ATL8C2 2947:1 ..774	nap					0	ATL8C2 2947:1 03..77 4	0.96	g36953 96	54	893	2.5e- 93	etical protei n [Arabi dopsis thalia na]
168167	ATU030 107	0	ATL8C1 5035:1 ..637	nap						ATL8C1 5035:2 62..63 7	0.96	g32506 93	54	326	1.7e- 31	(AF096 372) contai ns simila rity to Arabid opsis thalia na retrot ranspo son Athila (GB:X8 1801) [Arabi dopsis thalia na]
168168	ATU030 108		ATL8C5 882:13	nap						ATL8C5 882:11	0.95	g45895 74	54	300		(AL024 486) lectin like protei n [Arabi dopsis thalia na]
																(AB023 182)

168172	ATU030 112	ATL8C1 2359:1 ..1180	nap					ATL8C1 2359:3 69..89 4	0.92	g31281 71	54	1027	1.2e- 102	dopsis thalia nal (AC004 521) putati ve protei nase [Arabi dopsis thalia nal]
168173	ATU030 113	ATL8S1 2454:6 1..483	nap					ATL8S1 2454:6 1..475	0.92	g28322 45	54	503	1.3e- 41	(AF031 569) hypoth etical protei n [Zea mays]
168174	ATU030 114	ATL8S2 8277:1 ..377	nap					ATL8S2 8277:1 28..21 6	0.92	g46626 46	54	90	0.017	(AC006 429) hypoth etical protei n [Arabi dopsis thalia nal]
168175	ATU030 115	ATL8C4 7263:1 749..1	nap					ATL8C4 7263:1 749..1 9	0.92	g41917 74	54	853	8.2e- 88	(AC005 917) putati ve beta- 1,3- endogl ucanas e

168176	ATU030 116	ATL8C3 2920:7 97..1	nap					ATL8C3 2920:5 65..32	0.91	g28646 21	54	603	5.1e- 53	[Arabi dopsis thalia na] (AL021 811) hypoth etical protei n [Arabi dopsis thalia na]
168177	ATU030 117	ATL8C1 6188:1 ..971	nap					ATL8C1 6188:1 66..95 3	0.91	g12721 1	54	149	1.2e- 12	3- HYDROX YISOBU TYRATE DEHYDR OGENAS E (HIBAD H) [Pseud omonas aerugi nosa]
168178	ATU030 118	ATL8C4 2307:2 063..6 26	nap					ATL8C4 2307:1 885..6 26	0.91	g22528 38	54	1941	3.6e- 145	(AF013 293) No defini tion line found [Arabi dopsis thalia na]
168179	ATU030 119	ATL8C3 8287:3	nap					ATL8C3 8287:5	0.90	g45672 42	54	1697	1.1e- 160	(AC007 070)

168180	ATU030 120	50...22 41	nap				67...21 79	0.90	g44907 46	54	655	8.1e- 70	hypothetical protein [Arabidopsis thaliana] (AL035708) cytochrome P450-like protein [Arabidopsis thaliana]
168181	ATU030 121	ATL8C2 2653:1 104...1	nap				ATL8C2 2653:8 61...24 1	0.90	g11692 57	54	324	3.1e- 32	D-ALANINE--D-ALANINE LIGASE (D-ALANYLALANINE SYNTHETASE) [Haemophilus influenzae]
168182	ATU030 122	ATL8C1 5952:1 866...1	nap				ATL8C1 5952:1 745...5	0.89	g45875 16	54	1432	2.1e- 155	(AC007060) Strong

168185	ATU030 125	ATL8C6 811:92 0..1	nap						ATL8C6 811:83 4..15	0.86	g44552 03	54	624	8.9e- 51	(AL035 440) putati ve protei n [Arabi dopsis thalia na]
168186	ATU030 126	ATL8C9 269:14 24..1	nap						ATL8C9 269:10 57..32 2	0.86	g34452 08	54	1462		(AC004 786) putati ve amino- acid acetyl transf erase [Arabi dopsis thalia na]
168187	ATU030 127	ATL8C1 5479:2 449..1	nap						ATL8C1 5479:1 566..1 044	0.86	g30471 04	54	635	8.5e- 54	(AF058 919) No defini tion line found [Arabi dopsis thalia

168188	ATU030 128	ATL8C2 4850:5 275..4 085	nap				ATL8C2 4850:5 143..4 085	0.86	g48870 10	54	853	3.6e- 128	na] (AF123 503) Nt-gh3 deduce d protei n [Nicot iana tabacu m]
168189	ATU030 129	ATL8C2 5376:1 851..1	nap				ATL8C2 5376:1 183..3 0	0.86	g32427 11, g45570 69	54, 35	1506, 557	4.8e- 147, 5.9e- 74	(AC003 040) hypoth etical protei n [Arabi dopsis thalia na]; (AC007 045) hypoth etical protei n [Arabi dopsis thalia na]
168190	ATU030 130	ATL8C4 755:15 01..60 10	nap				ATL8C4 755:23 70..57 42	0.85	g32528 18	54	4123	0.0	(AC004 705) hypoth etical protei n [Arabi dopsis thalia na]

168191	ATU030 131	ATL8C2 8164:6 4..205 5	nap				ATL8C2 8164:6 4..199 0	0.85	g44328 44	54	557	3.2e- 39	thalia na] (AC006 283) unknown n protei n [Arabi dopsis thalia na]
168192	ATU030 132	ATL8C3 1602:1 ..2816	nap				ATL8C3 1602:1 05..28 16	0.83	g45220 05	54	3331	0.0	(AC007 069) putati ve revers e transc riptas e [Arabi dopsis thalia na]
168193	ATU030 133	ATL8S3 135:54 0..1	nap				ATL8S3 135:50 6..15	0.83	g33778 54	54	896	5.5e- 89	(AF076 274) No defini tion line found [Arabi dopsis thalia na]
168194	ATU030 134	ATL8S8 45:1.. 342	nap				ATL8S8 45:8.. 137	0.82	g40380 66	54	340	1.3e- 25	(AC005 897) hypoth etical

168198	ATU030 138	ATL8C3 7138:1 270..1	nap				ATL8C3 7138:1 270..1 74	0.79	g25831 22	54	643	(AC002 387) hypoth etical protei n [Arabi dopsis thalia na]
168199	ATU030 139	ATL8C1 4387:1 ..2167	nap				ATL8C1 4387:3 07..21 67	0.79	g33193 60	54	1996	(AF077 408) contai ns simila rity to Vicia faba retrot ranspo son- like gene (GB:AB 007467) [Arabi dopsis thalia na]
168200	ATU030 140	ATL8C3 0059:8 4..641	nap				ATL8C3 0059:1 47..53 0	0.79	g38498 34	54	879	(AL031 004) putati ve protei n [Arabi dopsis thalia na]

168201	ATU030 141	ATL8C4 1947:4 53..43 92	nap				ATL8C4 1947:4 53..43 15	0.78	g33778 16, g42637 68	54, 37	1882, 280	1.8e- 180, 9.7e- 14	na] (AF076 275) contai ns simila rity to Arabid opsis thalia na retrot ranspo son Athila (GB:X8 1801) [Arabi dopsis thalia na]; (AC006 218) hypoth etical protei n [Arabi dopsis thalia na]
168202	ATU030 142	ATL8C2 2755:1 147..1	nap				ATL8C2 2755:1 141..2 56	0.77	g36680 69	54	676	5.1e- 73	(U2800 7) Pto kinase intera ctor 1 [Lycop ersico n

168203	ATU030 143	ATL8C1 5046:1 ..1641	nap				ATL8C1 5046:1 76..14 05	0.76	g43253 51	54	1347	2.6e- 136	escule ntum] (AF128 394) simila r to Antirr hinum majus (garde n snapdr agon) TNP2 protei n (GB:X5 7297) [Arabi dopsis thalia nal]
168204	ATU030 144	ATL8C3 818:1. .1690	nap				ATL8C3 818:23 8..166 3	0.76	g22621 07	54	1215	7.8e- 128	(AC002 343) Ser/Th r protei n kinase isolog [Arabi dopsis thalia nal]
168205	ATU030 145	ATL8C1 2291:9 90..23 40	nap				ATL8C1 2291:1 209..2 033	0.76	g45389 04	54	1053	8.4e- 104	(Al049 482) cellul ase- like protei

168206	ATU030 146	ATL8C4 3418:1 ..974	nap						ATL8C4 3418:1 20..88 2	0.75	g31933 21	54	581		n [Arabi dopsis thalia na]
168207	ATU030 147	ATL8S2 8042:1 ..503	nap						ATL8S2 8042:7 1..453	0.74	g39287 34	54	479	1.7e- 47	(AF069 299) No defini tion line found [Arabi dopsis thalia na]
168208	ATU030 148	ATL8C1 4554:1 ..1069	nap						ATL8C1 4554:6 8..106 9	0.74	g22448 31	54	602	1.5e- 34	(AL034 355) ABC transp orter ATP- bindin g protei n [Strep tomyce s coelic olor]
															(Z9733 7) hypoth etical protei n [Arabi dopsis thalia

168209	ATU030 149	ATL8S1 9234:2 56..1	nap				ATL8S1 9234:2 56..90	0.73	g41509 32	54	124	2.4e- 10	na] (AC005 062) 60S riboso mal protei n L21 [Homo sapien s]
168210	ATU030 150	ATL8S2 3154:6 3..598	nap				ATL8S2 3154:6 3..533	0.71	g48952 00	54	160	1.1e- 13	(AC007 661) putati ve serine /threo nine protei n kinase [Arabi dopsis thalia na]
168211	ATU030 151	ATL8C3 7216:1 92..21 53	nap				ATL8C3 7216:5 14..16 82	0.71	g41602 92	54	1243		(Y1820 9) alpha- N- acetyl glucos aminid ase [Nicot iana tabacu m]
168212	ATU030 152	ATL8C1 2626:1 068..1	nap				ATL8C1 2626:1 068..4	0.71	g42205 23	54	498	3.1e- 51	(AL035 356) putati

168213	ATU030 153	ATL8C2 4529:2 143..1	nap					6	ATL8C2 4529:2 137..1 34	0.70	g38853 34	54	892	8.2e- 84	(AC005 623) putati ve argona ute protei n [Arabi dopsis thalia na]
168214	ATU030 154	ATL8C1 6325:1 ..5508	nap						ATL8C1 6325:8 18..54 56	0.70	g48369 07	54	3315	4.6e- 280	(AC007 153) Highly simila r to putati ve callos e syntha se cataly tic subuni t [Arabi dopsis thalia na]
168215	ATU030 155	ATL8C1 7225:1	nap						ATL8C1 7225:9	0.70	g23885 65	54	992	2.7e- 93	(AC000 098)

168216	ATU030 156	..1090	nap				7..597	0.70	g46802 06	54	67	0.028	Similar to Prunus pectin esterase (gb X9 5991). [Arabi dopsis thalia na]
	ATL8S3 0368:1 12..52 0						ATL8S3 0368:1 39..43 8						(AF114 171) hypoth etical protein [Sorgh um bicolor r]
168217	ATU030 157		nap				ATL8C7 292:14 18..22 6	0.70	g22447 49	54	606	1.8e- 52	(Z9733 5) hydrox ymethyl transferase [Arabi dopsis thalia na]
168218	ATU030 158		nap				ATL8S2 0416:1 90..47 7	0.69	g22282 31	54	99	1.1e- 05	(U2421 5) CymR [Pseud omonas putida]
168219	ATU030	ATL8C4	nap				ATL8C4	0.69	g36874	54	85	7.9e-	(AL031

168223	ATU030 163	795..1	ATL8C3 1554:1 342..8 00	nap						736..1 03	0.66	g34137 09	54	278	2.1e- 26	putative protein kinase [Arabis dopsis thaliana]
168224	ATU030 164	ATL8C3 3766:1 ..1442	ATL8C3 1554:1 296..8 00	nap						ATL8C3 3766:7 0..144 2	0.66	g44328 42	54	393	2.9e- 41	(AC006 283) hypothetical protein [Arabis dopsis thaliana]
168225	ATU030 165	ATL8S2 1401:5 57..1	ATL8S2 1401:4 35..56	nap						ATL8S2 1401:4 35..56	0.65	g13556 0	54	555	2.9e- 54	THREONINE 3- DEHYDROGENASE [Escherichia coli]
168226	ATU030 166	ATL8C1 4200:1 467..4	ATL8C1 4200:1 168..4	nap						ATL8C1 4200:1 168..4	0.65	g45393 22	54	1140	3.5e- 97	(AL035 679) putative

		84						84							ve protei n [Arabi dopsis thalia na]
168227	ATU030 167	ATL8C1 1638:4 16..12 66	nap					ATL8C1 1638:4 17..12 66	0.65	g45586 84	54	296	0.0022	(AC006 586) hypoth etical protei n [Arabi dopsis thalia na]	
168228	ATU030 168	ATL8C4 634:86 6..121	nap					ATL8C4 634:80 6..121	0.64	g22450 52	54	637	4.5e- 49	(Z9734 2) resist ance gene homolo g (fragm ent) [Arabi dopsis thalia na]	
168229	ATU030 169	ATL8C2 9076:1 3..614	nap					ATL8C2 9076:1 01..42 4	0.63	g28298 75	54	446	4.5e- 45	(AC002 396) Hypoth etical protei n [Arabi dopsis thalia na]	

168230	ATU030 170	ATL8C2 5088:2 979..1	nap				ATL8C2 5088:2 935..2 076	0.63	g45811 10	54	1641	8.5e- 133	(AC005 825) putati ve retrot ranspo son polyp rotein [Arabi dopsis thalia na]
168231	ATU030 171	ATL8C1 4528:1 ..290	nap				ATL8C1 4528:9 0..165	0.63	g44544 78	54	333	3.5e- 31	(AC006 234) hypoth etical protei n [Arabi dopsis thalia na]
168232	ATU030 172	ATL8C4 9114:1 ..1411	nap				ATL8C4 9114:1 80..12 45	0.63	g48368 72	54	2125	1.6e- 179	(AC007 260) lcl pr t_seq No defini tion line found [Arabi dopsis thalia na]
168233	ATU030 173	ATL8C4 2963:1 470..1	nap				ATL8C4 2963:1 389..1 40	0.60	g44163 01	54	1635	4.4e- 136	(AF105 716) gag protei

168234	ATU030 174	ATL8C2 7165:2 175..1 478	nap					ATL8C2 7165:1 924..1 499	0.59	g38343 08	54	490	6.9e- 51	n [Zea mays] (AC005 679) Strong simila rity to glycop rotein EP1 gb L16 983 Daucus carota and a member of S locus glycop rotein family PF 009 54. EST gb AA7 20110 comes from this gene. [Arabi dopsis thalia na]
168235	ATU030 175	ATL8S2 0829:1 ..411	nap					ATL8S2 0829:4 1..333	0.58	g24945 31	54	270	6.7e- 24	FLAGEL LAR BASAL- BODY

168236	ATU030 176	ATL8S2 5375:1 ..454	nap						ATL8S2 5375:1 39..43 3	0.56	g46782 23	54	298	5.8e- 29	ROD PROTEI N FLGF (PUTAT IVE PROXIM AL ROD PROTEI N) [Esche richia coli]
168237	ATU030 177	ATL8C3 8759:6 75..1	nap						ATL8C3 8759:4 56..20 7	0.56	g42637 17	54	350	7.3e- 38	(AC007 135) hypoth etical protei n [Arabi dopsis thalia na]
168238	ATU030 178	ATL8C4 4725:5 41..22	nap						ATL8C4 4725:5 82..21	0.53	g44163 02	54	2697	2.7e- 250	(AC006 223) putati ve inosit ol polyph osphat e 5- phosph atase [Arabi dopsis thalia na] (AF105 716) copia-

168239	ATU030 179	50	nap					53	0.52	g26210 81	54	190	type pol polypr oteins [Zea mays] (AE000 796) mevalo nate kinase [Metha nobact erium thermo autotr ophicu m]
168240	ATU030 180	ATL8S6 636:1. .562	nap					ATL8S6 636:11 ..543	0.50	g37575 16	54	883	(AC005 167) putati ve TMV resist ance protei n [Arabi dopsis thalia na]
168241	ATU030 181	ATL8C4 9903:3 870..1 42	nap					ATL8C4 9903:1 535..1 42	0.50	g32528 17	54	786	(AC004 705) putati ve MuDR protei n [Arabi dopsis thalia na]

168242	ATU030 182	ATL8C4 3715:1 ..2439	nap				ATL8C4 3715:9 1..243 9	0.50	g48951 71	54	2576	na] (AC007 662) putati ve pol protei n with Zn finger CCHC type domain [Arabi dopsis thalia na]
168243	ATU030 183	ATL8C1 8856:3 714..9 12	nap				ATL8C1 8856:3 510..9 12	0.49	g44067 98	54	2716	9.7e- 262 (AC006 304) putati ve helica se [Arabi dopsis thalia na]
168244	ATU030 184	ATL8C2 2654:8 96..1	nap				ATL8C2 2654:8 83..34	0.49	g31231 30	54	1143	1.4e- 113 HYPOTH ETICAL 61.8 KD TRP- ASP REPEAT S CONTAI NING. PROTEI N T32G6. 2 IN

168245	ATU030 185	ATL8C3 2921:1 ..591	nap						ATL8C3 2921:4 70..59 1	0.47	g49143 22	54	444	5.7e- 44	CHROMO SOME II [Arabi dopsis thalia na]
168246	ATU030 186	ATL8S1 9331:1 ..520	nap						ATL8S1 9331:7 4..501	0.47	g24954 98	54	538	1.4e- 51	HYPOTH ETICAL 33.9 KD PROTEI N IN INTF- EAEH INTERG ENIC REGION [Esche richia coli]
168247	ATU030 187	ATL8C5 503:19 73..1	nap						ATL8C5 503:16 50..15	0.44	g44327 94	54	2524	1.6e- 234	(AC006 437) putati ve Tnp2 Tam1 transp oson protei n [Arabi

168248	ATU030 188	ATL8S7 614:57 9..10	nap					ATL8S7 614:22 1..51	0.43	g44163 03	54	507	1.9e- 32	(AF105 716) gag protei n [Zea mays]
168249	ATU030 189	ATL8C2 2672:1 105..2 19	nap					ATL8C2 2672:9 32..21 9	0.42	g32928 23	54	472	5.9e- 56	(AL031 018) putati ve protei n [Arabi dopsis thalia na]
168250	ATU030 190	ATL8C1 153:31 46..1	nap					ATL8C1 153:28 14..21 9	0.42	g42638 31	54	3125	8.1e- 283	(AC006 067) putati ve revers e transc riptas e [Arabi dopsis thalia na]
168251	ATU030 191	ATL8C4 2011:1 ..3765	nap					ATL8C4 2011:5 59..37 06	0.42	g43888 18	54	1279	8.1e- 139	(AC006 528) putati ve pol ypr otein with a

168252	ATU030 192	ATL8C8 285:77 7..371	nap						ATL8C8 285:68 5..371	0.40	g43253 53	54	95	5.5e- 08	Zn- finger CCHC type domain (prosi te:QDO C50158) and a DDE integr ase signat ure motif [Arabi dopsis thalia na]
168253	ATU030 193	ATL8C2 1723:1 556..6 69	nap								g47739 10	54	91	0.0004 0	(AF147 259) No defini tion line found [Arabi dopsis thalia na]

168262	201	634:1. .460								05					42	266) putati ve Athila -like protei n [Arabi dopsis thalia na]
	ATU030 202	ATL8S1 7871:4 23..18 2	nap						ATL8S1 7871:4 00..27 9	1.00	g33778 12	53	275		2.7e- 22	(AF076 275) contai ns simila rity to heavy- metal- associ ated domain contai ning protei ns (Pfam: HMA.hm , score: 12.02) [Arabi dopsis thalia na]
168263	ATU030 203	ATL8C1 244:94 9..1	nap								g41853 10	54	1062		1.5e- 91	(AF090 446) gag protei

	207	835:1. .942								63								07	220) unknow n protei n [Arabi dopsis thalia na]
168268	ATU030 208	ATL8C4 6968:1 .1188	nap							g45859 31	54	1028						4.9e- 97	(AC007 211) hypothe tical protei n [Arabi dopsis thalia na]
168269	ATU030 209	ATL8S1 0389:3 56..1	nap							g11782 0	54	328						4.1e- 16	CYTOCH ROME B6 [Spina cia olerac ea]
168270	ATU030 210	ATL8S2 6126:5 95..1	nap							g39154 25	54	115						3.6e- 05	HYPOTH ETICAL 30.3 KD PROTEI N IN PUTP- PHOH INTERG ENIC REGION []
168271	ATU030 211	ATL8C2 7382:1	nap							g22816 45	54	190							(AF003 103)

168272	ATU030 212	ATL8C4 3517:1 ..1934	nap						ATL8C4 3517:1 132..1 931	1.00	g12607 8	53	331		AP2 domain contai ning protei n RAP2.1 0 [Arabi dopsis thalia nal]
168273	ATU030 213	ATL8C2 9464:7 91..36 8	nap								g43712 95	54	257	4.2e- 20	(AC006 260) putati ve CCAAT- bindin g transc riptio n factor [Arabi dopsis thalia]

168276	ATU030 216	ATL8C4 6404:8 68..62	nap										g40068 81	54	314	5.3e- 35	(Z9970 7) putati ve protei n [Arabi dopsis thalia na]	na cDNA H76538 ; coded for by A. thalia na cDNA H76290 [Arabi dopsis thalia na]
168277	ATU030 217	ATL8S1 8412:5 97..1	nap										g26186 94	54	930	3.2e- 90	(AC002 510) putati ve zinc- finger protei n [Arabi dopsis thalia na]	na cDNA H76538 ; coded for by A. thalia na cDNA H76290 [Arabi dopsis thalia na]
168278	ATU030 218	ATL8C4 1183:6 93..1	nap										g27654 42	54	240	8.1e- 22	(Y1506 6) putati	na cDNA H76538 ; coded for by A. thalia na cDNA H76290 [Arabi dopsis thalia na]

168279	ATU030 219	ATL8C3 1413:1 ..2247	nap							g37383 37	54	2625	2.1e- 263	(AC005 170) putative reverse transcriptase [Arabidopsis thaliana]
168280	ATU030 220	ATL8C2 4784:4 870..3 998	nap							g45672 96	54	1267	3.2e- 117	(AC006 918) putative Athila retroelement ORF1 protein [Arabidopsis thaliana]
168281	ATU030 221	ATL8C2 5624:4 29..18 86	nap							g44163 01	54	2126	3.7e- 155	(AF105 716) gag protein

168282	ATU030 222	ATL8C1 3274:1 ..835	nap							945876 78	54	364	6.4e- 41	n [Zea mays] (AC007 197) putati ve diseas e resist ance gene, 5', partia l [Arabi dopsis thalia na]
168283	ATU030 223	ATL8S6 373:55 2..102	nap							911697 18	54	225		FUMARA TE AND NITRAT E REDUCT ION REGULA TORY PROTEI N HOMOLO G [Haemo philus influe nzae Rd]
168284	ATU030 224	ATL8S6 508:26 ..453	nap							945835 50	54	669		(AJ010 873) KCO- like

168285	ATU030 225	ATL8S2 5975:5 04..1	nap										g47339 75	54	203	1.2e- 16	protein 3 [Arabi dopsis thalia na]
168286	ATU030 226	ATL8C3 4711:1 ..236	nap										g46789 52	54	246	3.3e- 07	(AC007 264) hypo- thetical protein [Arabi dopsis thalia na]
168287	ATU030 227	ATL8C2 1988:1 ..607	nap										g47538 89	54	479	2.7e- 47	(AJ005 761) Tpv2- 1c [Phase olus vulgar is]
168288	ATU030 228	ATL8C2 1303:2 634..1 713	nap										g45394 60	54	477	2.4e- 46	(AL049 500) putati ve protein

168289	ATU030 229	ATL8S2 4316:3 77..58 5	nap									g42637 01	54	173	2.0e- 17	[Arabi dopsis thalia na] (AC006 223) hypoth etical protei n [Arabi dopsis thalia na]
168290	ATU030 230	ATL8S2 5660:5 68..1	nap									g44163 03	54	713	3.2e- 37	(AF105 716) gag protei n [Zea mays]
168291	ATU030 231	ATL8C7 327:52 1..1	nap									g32490 67	54	357	8.3e- 27	(AC004 473) T13D8. 7 [Arabi dopsis thalia na]
168292	ATU030 232	ATL8C2 6422:1 ..805	nap									g46782 01	54	298	3.4e- 35	(AC007 134) hypoth etical protei n [Arabi dopsis thalia na]
168293	ATU030	ATL8C3	nap									g44328	54	332	4.1e-	(AC006

	233	518:1. .901								49				31	300) hypoth etical protei n [Arabi dopsis thalia na]
168294	ATU030 234	ATL8C1 2853:1 ..527	nap							g48951 64	54	576	6.5e- 51	(AC007 231) putati ve diseas e resist ance protei n [Arabi dopsis thalia na]	
168295	ATU030 235	ATL8C7 071:1. .969	nap					ATL8C7 071:20 3..969	1.00	g45811 42	53	1065	4.9e- 50	(AC006 919) unknow n protei n [Arabi dopsis thalia na]	
168296	ATU030 236	ATL8S2 6736:6 7..609	nap							g44552 87	54	162		(AL035 527) putati ve protei n [Arabi	

168301	ATU030 241	ATL8S8 959:51 5..1	nap										g45444 60	54	189	1.8e- 15	(AC006 592) putati ve revers e transc riptas e [Arabi dopsis thalia na]	[Strep tomyce s coelic olor]
168302	ATU030 242	ATL8C3 0637:1 ..950	nap										g41159 25	54	152	5.5e- 15	(AF118 222) contai ns simila rity to RNA recogn ition motifs (Pfam: PF0007 6, Score= 5.5e- 23, N=2) [Arabi dopsis thalia na]	(AF118 222) contai ns simila rity to RNA recogn ition motifs (Pfam: PF0007 6, Score= 5.5e- 23, N=2) [Arabi dopsis thalia na]
168303	ATU030	ATL8C4	nap										g45389	54	117	1.3e-	(AL049	(AL049

	243	053:47 74..41 90								17					07	482) putati ve protei n [Arabi dopsis thalia na]
168304	ATU030 244	ATL8C1 5311:9 61..1	nap							g41853 10	54	1216	5.0e- 108	(AF090 446) gag protei n [Zea mays]		
168305	ATU030 245	ATL8S2 4541:5 18..1	nap							g32935 47	54	309	1.1e- 27	(AF072 709) putati ve oxidor educta se [Strep tomyce s livida ns]		
168306	ATU030 246	ATL8C2 4896:1 093..1	nap							g13271 5	54	141	3.9e- 11	CHLORO PLAST 50S RIBOSO MAL PROTEI N I16 [Nicot iana tabacu m]		
168307	ATU030	ATL8S2	nap							g56505	53	304	5.3e-	(X6237		

	247	2500:1 ..492					2500:5 1..485	6	14	3)
168308	ATU030 248	ATL8S1 5664:1 ..452	nap				ATL8S1 5664:4 09..16	0.99	53	(U9228 8) HN1 [Human herpes virus 6]
168309	ATU030 249	ATL8C4 6378:2 03..51 9	nap				ATL8C4 6378:2 03..42 9	0.98	53	(AC006 217) hypoth etical protei n [Arabi dopsis thalia na]
168310	ATU030 250	ATL8C4 4090:1 ..810	nap				ATL8C4 4090:2 31..56 1	0.98	53	(AL031 264) predic ted using Genefi nder; simila r to Protei n phosph atase 2C [Caeno rhabdi tis

168311	ATU030 251	ATL8C1 430:1. .3748	nap					ATL8C1 430:12 6..822	0.96	g45443 72	53	2386	8.6e- 255	(AC006 920) putati ve revers e transc riptas e [Arabi dopsis thalia na]
168312	ATU030 252	ATL8C2 4841:1 ..820	nap					ATL8C2 4841:3 1..415	0.96	g40380 55	53	1196	2.0e- 63	(AC005 897) putati ve cytoch rome P450 [Arabi dopsis thalia na]
168313	ATU030 253	ATL8C1 2562:1 276..2 350	nap					ATL8C1 2562:2 229..1 889	0.96	g44067 85	53	80	1.4e- 06	(AC006 532) hypoth etical protei n [Arabi dopsis thalia na]
168314	ATU030 254	ATL8C1 6131:1 ..1095	nap					ATL8C1 6131:2 02..78 2	0.95	g34618 30	53	732	1.3e- 49	(AC004 138) homeot ic

168315	ATU030 255	ATL8C5 696:83 9..1	nap						0.95	g22451 24	53	235		protein AGL30 [Arabi dopsis thalia na]
168316	ATU030 256	ATL8C3 405:1. .404	nap						0.94	g34210 77	53	644	9.7e- 53	(Z9734 3) protein kinase [Arabi dopsis thalia na]
168317	ATU030 257	ATL8C3 3345:1 11..18 25	nap						0.94	g38595 98	53	474	1.5e- 46	(AF104 919) contai ns simila rity to Myb DNA- bindin g domain s (Pfam:

168318	ATU030 258	ATL8S1 9165:4 34..1	nap						0.93	g44557 51	53	336	3.7e- 27	(AL035 478) putati ve oxidor educta se [Strep tomyce s coelic olor]	PF0024 9, E=3.7e -27 N=3) [Arabi dopsis thalia na]
168319	ATU030 259	ATL8S1 3765:8 4..459	nap						0.93	g36884 30	53	50	0.0090	(AJ011 565) OB- RGRP [Mus muscul us]	
168320	ATU030 260	ATL8S2 5563:5 07..1	nap						0.92	g19451 03	53	173	1.7e- 14	(D8880 2) B. subtil is mannos e-6- phosph ate isomer ase; P39841 (1049)	

168321	ATU030 261	ATL8C7 284:12 03..67 7	nap					ATL8C7 284:11 55..68 9	0.92	g11579 3	53	192	2.0e- 19	[Bacillus subtilis] CHLORO PHYLL A-B BINDIN G PROTEI N OF LHCII TYPE III PRECUR SOR (CAB) [Hordeum vulgare]
168322	ATU030 262	ATL8C4 5674:2 459..1 679	nap					ATL8C4 5674:2 441..1 679	0.91	g47536 53	53	687	9.4e- 71	(Al049751) putative protein [Arabis dopsis thaliana]
168323	ATU030 263	ATL8C1 7728:3 70..73 7	nap					ATL8C1 7728:3 70..69 0	0.89	g38057 62	53	513	8.3e- 46	(AC005693) hypothetical protein [Arabis dopsis thaliana]

168324	ATU030 264	ATL8C8 05:259 3..566	nap				ATL8C8 05:169 3..569	0.89	g34829 74	53	1032	1.2e- 104	nal (AL031 369) ATP- depend ent Clp protei nase- like protei n [Arabi dopsis thalia nal]
168325	ATU030 265	ATL8S2 6643:1 ..554	nap				ATL8S2 6643:5 04..2	0.88	g32935 44	53	248		(AF072 709) unknow n [Strep tomyce s livida ns]
168326	ATU030 266	ATL8C1 1758:5 10..1	nap				ATL8C1 1758:5 10..10 0	0.88	g37765 60	53	576	6.9e- 44	(AC005 388) Simila r to gb U51 990 hPrp18 (splic ing factor) gene from Homo sapien s.

168327	ATU030 267	ATL8S2 8108:1 ..568	nap					ATL8S2 8108:1 5..568	0.88	g23400 79	53	579	6.0e- 57	(L6354 0) putati ve [Agrob acteri um tumefa ciens]	[Arabi dopsis thalia na]
168328	ATU030 268	ATL8C4 6493:1 ..907	nap					ATL8C4 6493:3 1..907	0.88	g20987 13	53	787	3.0e- 82	(U8297 7) pectin estera se [Citru s sinens is]	
168329	ATU030 269	ATL8C2 736:88 0..1	nap					ATL8C2 736:79 6..1	0.87	g23927 65	53	649	7.4e- 59	(AC002 534) hypoth etical protei n [Arabi dopsis thalia na]	
168330	ATU030 270	ATL8S4 96:483 ..1	nap					ATL8S4 96:483 ..104	0.87	g42205 25	53	355	2.7e- 34	(AL035 356) putati ve tRNA isopen tenylt ransfe	

168331	ATU030 271	ATL8C5 265:1. .647	nap						ATL8C5 265:21 3..86	0.87	g30803 54	53	150	1.4e- 12	rase [Arabi dopsis thalia na]
168332	ATU030 272	ATL8C9 751:14 75..1	nap						ATL8C9 751:14 09..37 5	0.86	g11710 27	53	1315	1.8e- 103	MALE STERIL ITY PROTEI N 2 [Arabi dopsis thalia na]
168333	ATU030 273	ATL8S1 7087:3 73..10 1	nap						ATL8S1 7087:2 93..21 2	0.86	g35137 32	53	218	2.6e- 17	(AF080 118) F8M12. 4 gene produc t [Arabi dopsis thalia na]
168334	ATU030 274	ATL8C1 4114:1 75..21 60	nap						ATL8C1 4114:5 06..20 97	0.86	g22528 36	53	1869	1.8e- 172	(AF013 293) contai ns weak simila

168335	ATU030 275	ATL8C1 3683:1 252..8 99	nap				ATL8C1 3683:1 252..9 50	0.86	g37460 60	53	372	2.3e- 25	rity to S. cerevi siae BOB1 protei n (PIR:S 45444) [Arabi dopsis thalia nal]
168336	ATU030 276	ATL8C2 5767:1 ..566	nap				ATL8C2 5767:5 1..566	0.85	g25550 98	53	847	8.0e- 82	(AF019 407) GTP- bindin g protei n [Caulo bacter cresce ntus]
168337	ATU030 277	ATL8C3 4666:1 644..1	nap				ATL8C3 4666:1 644..2 3	0.85	g27393 82	53	881	4.2e- 72	(AC002 505) myosin heavy chain- like

168338	ATU030 278	ATL8C2 0932:1 811..8 76	nap				ATL8C2 0932:1 613..8 76	0.84	g17103 94	53	765	4.0e- 82	protein [Arabi dopsis thalia na]
168339	ATU030 279	ATL8C2 6107:2 289..1	nap				ATL8C2 6107:2 228..1 33	0.83	g45861 17	53	1288	5.5e- 114	(AL049 638) putati ve protein [Arabi dopsis thalia na]
168340	ATU030 280	ATL8C3 5272:9 74..23	nap				ATL8C3 5272:9 74..31	0.83	g42204 90	53	389	2.0e- 29	(AC006 069) hypo

168341	ATU030 281	7	ATL8C2 6097:1 ..1020	nap						1	ATL8C2 6097:2 1..651	0.83	g31932 94	53	1144	2.8e- 115	etical protei n [Arabi dopsis thalia na]
168342	ATU030 282		ATL8C2 6704:2 086..1	nap							ATL8C2 6704:2 086..1 14	0.83	g38818 12	53	149	7.6e- 05	(Z7078 3) simila r to DNA direct ed RNA polyme rase III; cDNA EST EMBL:T 00345 comes

168343	ATU030 283	ATL8C3 0791:1 891..2 880	nap					ATL8C3 0791:1 891..2 866	0.83	g44173 03	53	1076	3.9e- 97	(AC006 446) putati ve En/Spm transp oson protei n [Arabi dopsis thalia na]
168344	ATU030 284	ATL8C8 067:22 89..1	nap					ATL8C8 067:22 89..94	0.83	g34618 38	53	712	8.7e- 69	(AC005 315) putati ve recept or protei n kinase [Arabi dopsis thalia na]
168345	ATU030 285	ATL8C3 6393:1 073..1	nap					ATL8C3 6393:9 97..12 3	0.81	g45389 08	53	1044	1.1e- 82	(AL049 482) putati ve protei n

168346	ATU030 286	ATL8C2 0709:4 626..2 057	nap					ATL8C2 0709:4 626..3 614	0.81	g41159 16	53	293	4.4e- 29	(AF118 222) F3H7.9 gene produc t [Arabi dopsis thalia na]
168347	ATU030 287	ATL8C4 7993:2 762..1 352	nap					ATL8C4 7993:2 664..1 352	0.81	g45393 42	53	595	1.7e- 46	(AL035 539) putati ve protei n [Arabi dopsis thalia na]
168348	ATU030 288	ATL8C4 8198:1 135..1 65	nap					ATL8C4 8198:1 008..1 65	0.80	g25985 75	53	588	2.6e- 64	(Y1529 3) MtN21 [Medic ago trunca tula]
168349	ATU030 289	ATL8C2 3661:1 ..2774	nap					ATL8C2 3661:6 47..27 68	0.79	g26186 92, g26687 50	53, 45	739, 96	4.1e- 60, 5.6e- 06	(AC002 510) putati ve zinc- finger protei n [Arabi

168350	ATU030 290	ATL8C1 7362:4 558..1 474	nap					ATL8C1 7362:4 401..1 777	0.78			g10823 37	53	172	1.3e- 08	DNA helica se_Q1 - human [Homo sapien s]	dopsis thalia nal; (AF034 949) riboso mal protei n L30 [Zea mays]
168351	ATU030 291	ATL8C4 1433:1 ..2216	nap					ATL8C4 1433:4 8..159 6	0.78			g46801 83	53	968	2.6e- 101	(AF111 709) gag- pol protei n [Oryza sativa subsp. indica]	
168352	ATU030 292	ATL8C3 941:17 66..53 2	nap					ATL8C3 941:16 25..76 7	0.77			g73050 2	53	108	3.3e- 07	ACTIVA TOR 1 41 KD SUBUNI T (REPLI CATION FACTOR C 41 KD	

168353	ATU030 293	ATL8C1 3618:2 903..1 256	nap					ATL8C1 3618:2 594..1 281	0.76	g41159 32	53	258	1.8e- 19	(AF118 223) No defini tion line found [Arabi dopsis thalia na]	SUBUNI T) [Saach aromyc es cerevi siae]
168354	ATU030 294	ATL8S1 418:56 1..1	nap					ATL8S1 418:43 8..149	0.75	g29601 54	53	119	5.3e- 12	(AL022 121) hypoth etical protei n Rv3730 c [Mycob acteri um tuberc ulosis]	
168355	ATU030 295	ATL8C1 2261:1 ..1297	nap					ATL8C1 2261:3 64..11 22	0.75	g48877 59	53	1246	1.1e- 129	(AC006 533) putati ve ARI,RI NG finger protei	

168356	ATU030 296	ATL8C3 1466:1 808..1	nap					ATL8C3 1466:1 287..5 3	0.74	g45396 64	53	264	2.5e- 21	n [Arabi dopsis thalia nal] (AF061 282) hypoth etical protei n [Sorgh um bicolo r]
168357	ATU030 297	ATL8C4 8920:1 493..1 93	nap					ATL8C4 8920:1 443..1 93	0.73	g46801 92	53	1256	2.6e- 104	(AF111 710) hypoth etical protei n [Oryza sativa subsp. indica]
168358	ATU030 298	ATL8C5 247:17 61..1	nap					ATL8C5 247:17 61..60 3	0.72	g31504 04	53	378	3.4e- 42	(AC004 165) putati ve mitoch ondria l carrie r protei n [Arabi dopsis thalia

168359	ATU030 299	ATL8C3 3257:1 ..3666	nap				ATL8C3 3257:4 4..189 6	0.72	945393 73	53	2492	4.5e- 261	na] (AL049 525) putati ve retrot ranspo son polypr otein [Arabi dopsis thalia na]
168360	ATU030 300	ATL8S1 7112:5 29..1	nap				ATL8S1 7112:5 29..11 5	0.72	948039 52	53	117	0.25	(AC006 202) hypoth etical protei n [Arabi dopsis thalia na]
168361	ATU030 301	ATL8C4 22:180 ..794	nap				ATL8C4 22:262 ..214	0.71	931933 09	53	827	1.2e- 81	(AF069 300) No defini tion line found [Arabi dopsis thalia na]
168362	ATU030 302	ATL8S9 435:61 ..447	nap				ATL8S9 435:15 7..363	0.69	944690 17	53	187	4.5e- 14	(AL035 602) hypoth etical protei

168363	ATU030 303	ATL8C4 1993:2 477..3 218	nap					ATL8C4 1993:2 477..3 206	0.69	g21911 58	53	605	8.3e- 52	n [Arabi dopsis thalia nal] (AF007 270) contai ns simila rity to A. thalia na zinc finger protei n (PID:g 976277) [Arabi dopsis thalia nal]
168364	ATU030 304	ATL8C4 9799:1 ..3637	nap					ATL8C4 9799:3 68..19 24	0.69	g42635 43	53	1650	4.3e- 140	(AC006 250) putati ve Athila retroee lement ORF1 protei n [Arabi dopsis thalia nal]
168365	ATU030	ATL8C9	nap					ATL8C9	0.68	g33373	53	910	4.6e-	(AC004

	305	746:11 09..26 41					746:11 21..26 41	67				111	481) hypoth etical protei n [Arabi dopsis thalia na]
168366	ATU030 306	ATL8C1 3719:1 11..12 48	nap				ATL8C1 3719:4 51..74 0	0.68	53	699	2.4e- 74		hypoth etical protei n - garden snapdr agon [l]
168367	ATU030 307	ATL8C1 7827:3 184..1	nap				ATL8C1 7827:3 184..3 8	0.68	53	1939			(AC007 069) putati ve revers e transc riptas e [Arabi dopsis thalia na]
168368	ATU030 308	ATL8S2 5056:2 33..62 1	nap				ATL8S2 5056:2 33..49 0	0.68	53	175	5.2e- 19		(AC004 261) hypoth etical protei n [Arabi dopsis thalia na]

168369	ATU030 309	ATL8C3 4114:1 ..510	nap				ATL8C3 4114:9 0..276	0.67	943357 40	53	456	3.4e- 44	(AC006 248) putati ve zinc- finger protei n [Arabi dopsis thalia na]
168370	ATU030 310	ATL8S1 9945:4 43..1	nap				ATL8S1 9945:4 43..54	0.65	928967 41	53	271	2.3e- 19	(AL021 897) hypoth etical protei n Rv1104 [Mycob acteri um tuberc ulosis]
168371	ATU030 311	ATL8S2 4480:1 ..497	nap				ATL8S2 4480:4 7..447	0.65	911682 76	53	461	2.9e- 32	ACETYL - COENZY ME A CARBOX YLASE CARBOX YL TRANSF ERASE SUBUNI T ALPHA [Haemo philus

168372	ATU030 312	ATL8S2 9110:1 ..475	nap				ATL8S2 9110:7 5..442	0.65	g32585 76	53	538	1.8e- 54	(U8995 9) Unknown protein [Arabi dopsis thalia na]
168373	ATU030 313	ATL8C4 0359:4 29..81 3	nap				ATL8C4 0359:4 29..48 8	0.65	g41851 47	53	295	5.8e- 30	(AC005 724) hypoth etical protein [Arabi dopsis thalia na]
168374	ATU030 314	ATL8S1 4410:5 63..1	nap				ATL8S1 4410:5 10..20 5	0.64	g28961 37	53	520	1.5e- 44	(AF047 025) DNA- direct ed RNA polyme rase alpha chain [Pseud omonas aerugi nos]
168375	ATU030 315	ATL8C4 979:51 3..1	nap				ATL8C4 979:34 3..85	0.64	g39536 03	53	286	5.9e- 23	(AB008 490) respon se

168376	ATU030 316	ATL8C4 993:27 8..1	nap						ATL8C4 993:27 8..97	0.63	g37765 62	53	167	1.1e- 09	(AC005 388) Simila r to gb X80 472 STS15 gene from Solanu m tubero sum. [Arabi dopsis thalia na]
168377	ATU030 317	ATL8C3 9170:1 ..2629	nap						ATL8C3 9170:6 2..179 3, ATL8C3 9170:2 596..2 176	0.63, 0.68	g44327 97	53	1289	5.2e- 116	(AC006 437) putati ve pol polypr oteins [Arabi dopsis thalia na]
168378	ATU030 318	ATL8C4 1962:1 315..1 026	nap						ATL8C4 1962:1 224..1 026	0.62	g47339 58	53	431	7.5e- 41	(AC007 294) unknow n protei n [Arabi

168379	ATU030 319	ATL8S3 0613:7 9..558	nap					ATL8S3 0613:7 9..517	0.62	g25069 12	53	277	1.3e- 17	ENDONU CLEASE V (DEOXY INOSIN E 3'ENDO NUCLEA SE) [I]
168380	ATU030 320	ATL8C9 703:32 8..110 4	nap					ATL8C9 703:85 8..358	0.61	g54191 3	53	597	1.1e- 32	oleoyl - [Brass ica napus]
168381	ATU030 321	ATL8S2 6314:3 42..1	nap					ATL8S2 6314:3 42..26	0.60	g45389 57	53	310	(AL049 488) putati ve protei n [Arabi dopsis thalia na]	
168382	ATU030 322	ATL8C4 7351:1 528..8 62	nap					ATL8C4 7351:1 440..8 62	0.60	g44903 14	53	791	1.7e- 71	(AL035 678) putati ve protei n [Arabi dopsis thalia na]
168383	ATU030 323	ATL8C2 2290:2 610..1	nap					ATL8C2 2290:2 492..1	0.58	g31525 98	53	1185	1.6e- 115	(AC002 986) Contai

168385	ATU030 325	ATL8C3 8983:1 417..2 211	nap					ATL8C3 8983:1 480..2 163	0.57	g48352 45	53	373	8.9e- 32	(AL049 862) putati ve mitoch ondria l protei n [Arabi dopsis thalia na]
168386	ATU030 326	ATL8C4 8564:1 443..1	nap					ATL8C4 8564:1 317..1 03	0.56	g36000 40	53	1558	2.6e- 161	(AF080 119) simila r to Arabid opsis thalia na diseas e resist ance protei n RPS2 (GB:U1 4158) [Arabi

168387	ATU030 327	ATL8C3 1842:1 ..1080	nap					ATL8C3 1842:6 3..375	0.56	g38105 90	53	304	2.8e- 26	dopsis thalia nal (AC005 398) hypoth etical protei n [Arabi dopsis thalia nal]
168388	ATU030 328	ATL8C4 2874:1 ..1022	nap					ATL8C4 2874:5 41..76 7	0.56	g43887 24	53	1034	4.9e- 105	(AC006 413) putati ve Athila ORF1 protei n [Arabi dopsis thalia nal]
168389	ATU030 329	ATL8C4 7274:1 110..1 657	nap					ATL8C4 7274:1 110..1 627	0.56	g12361 14	53	285	1.0e- 26	(U3484 3) D123 [Rattu s norveg icus]
168390	ATU030 330	ATL8C4 1560:6 14..1	nap					ATL8C4 1560:4 64..73	0.55	g21601 59	53	569	5.1e- 55	(AC000 132) F21M12 .4 gene produc t [Arabi

168391	ATU030 331	ATL8C3 5323:4 758..1	nap						ATL8C3 5323:4 572..1 0	0.55	g46801 83	53	515	6.2e- 24	dopsis thalia na] (AF111 709) gag- pol protei n [Oryza sativa subsp. indica ,]
168392	ATU030 332	ATL8C2 1340:1 ..1026	nap						ATL8C2 1340:5 05..42 7	0.54	g42061 96	53	201	3.5e- 10	(AF071 527) hypo thetical protei n [Arabi dopsis thalia na]
168393	ATU030 333	ATL8C1 7045:3 235..1	nap						ATL8C1 7045:2 657..8 4	0.53	g31422 95	53	718	2.4e- 79	(AC002 411) Strong simila rity to phosph oribos ylanth ranila te transf erase gb D86 180 from

															Pisum sativu m. [Arabi dopsis thalia na]
168394	ATU030 334	ATL8C4 3946:8 01..25 33	nap					ATL8C4 3946:8 01..25 02	0.51	g13451 32	53	603			(U4702 9) ERECTA [Arabi dopsis thalia na]
168395	ATU030 335	ATL8C1 2354:1 ..484	nap					ATL8C1 2354:5 2..484	0.51	g38734 08	53	726	5.2e- 65		(L7692 6) putati ve zinc finger protei n [Arabi dopsis thalia na]
168396	ATU030 336	ATL8C7 1:1799 ..3139	nap					ATL8C7 1:1799 ..2328	0.51	g27658 17	53	338	1.3e- 25		(Z9535 2) AtMlo- hl [Arabi dopsis thalia na]
168397	ATU030 337	ATL8C4 5510:2 187..1	nap					ATL8C4 5510:2 088..2 61	0.50	g46801 83	53	1024	1.0e- 97		(AF111 709) gag- pol protei n

168398	ATU030 338	ATL8C1 8671:2 821..1	nap					ATL8C1 8671:2 732..1 93	0.50		g10763 15, g40069 15	53, 39	125, 128	1.1e- 08, 1.8e- 08	[Oryza sativa subsp. indica] cytoch rome P450 - Arabid opsis thalia na [Arabi dopsis thalia na]; (Z9970 8) hypoth etical protei n [Arabi dopsis thalia na]
168399	ATU030 339	ATL8C3 4034:3 43..19 66	nap					ATL8C3 4034:3 43..19 08	0.50		g26322 54	53	638	4.1e- 52	(Y1246 5) serine /threo nine kinase [Sorgh um bicolo r]
168400	ATU030 340	ATL8C1 5163:1 136..5 70	nap					ATL8C1 5163:1 136..5 70	0.50		g12464 03	53	301	2.2e- 27	(X9469 8) TINY [Arabi

168401	ATU030 341	ATL8C3 0640:3 42..94 9	nap					ATL8C3 0640:3 42..92 7	0.50	g26186 94	53	889	5.9e- 88	dopsis thalia nal (AC002 510) putati ve zinc- finger protei n [Arabi dopsis thalia nal]
168402	ATU030 342	ATL8C7 079:29 8..749	nap					ATL8C7 079:29 8..619	0.49	g29110 77	53	509	4.1e- 53	(AL021 960) gibber ellin 20- oxidas e-like protei n [Arabi dopsis thalia nal]
168403	ATU030 343	ATL8S1 5263:5 24..1	nap					ATL8S1 5263:4 11..18 2	0.49	g44163 03	53	479	1.2e- 22	(AF105 716) gag protei n [Zea mays] (Y1519 4) GRS protei n [Arabi
168404	ATU030 344	ATL8C2 66:166 4..691	nap					ATL8C2 66:155 6..706	0.49	g25699 40	53	283	4.8e- 35	n [Arabi

168405	ATU030 345	ATL8S1 4394:9 3..610	nap						ATL8S1 4394:3 69..53 5	0.49	g43097 03	53	512	1.1e- 48	dopsis thalia nal (AC006 266) putati ve transp oson protei n [Arabi dopsis thalia nal]
168406	ATU030 346	ATL8S2 2857:1 ..531	nap						ATL8S2 2857:9 8..518	0.46	g42104 67	53	280	2.9e- 25	(AB019 032) ORF [Ralst onia eutrop ha]
168407	ATU030 347	ATL8C5 739:23 27..43	nap						ATL8C5 739:19 15..51	0.44	g33193 60	53	2250	1.1e- 208	(AF077 408) contai ns simila rity to Vicia faba retrot ranspo son- like gene (GB:AB 007467) [Arabi

168408	ATU030 348	ATL8C3 9033:7 32..1	nap					ATL8C3 9033:6 71..34 6	0.44	g45080 80	53	84 %	4.7e- 08	(AC005 882) 69873 [Arabi dopsis thalia na]
168409	ATU030 349	ATL8C4 8595:6 27..17 49	nap					ATL8C4 8595:6 27..12 12	0.44	g40068 29	53	837	4.8e- 82	(AC005 970) putati ve protei n kinase [Arabi dopsis thalia na]
168410	ATU030 350	ATL8C3 9564:9 31..1	nap					ATL8C3 9564:8 96..43	0.41	g44551 82	53	1173	2.9e- 122	(AL035 521) putati ve protei n [Arabi dopsis thalia na]
168411	ATU030 351	ATL8C4 2311:2 663..1 990	nap							g33865 34	53	504	1.6e- 43	(AF078 934) marine r transp osase [Glyci ne max]

168412	ATU030 352	ATL8S2 0870:1 ..396	nap						g11750 83	53	369	1.9e- 34	HYPOTH ETICAL PROTEI N HI0056 [Haemo philus influe nzae Rd]
168413	ATU030 353	ATL8S2 4361:3 1..636	nap						g30470 70	53	152	2.3e- 15	(AF058 825) No defini tion line found [Arabi dopsis thalia na]
168414	ATU030 354	ATL8S5 385:1. .327	nap						g48840 33	53	215	2.9e- 13	(AJ133 753) peptid e methio nine sulfox ide reduct ase [Arabi dopsis thalia na]
168415	ATU030 355	ATL8C3 555:18 44..69	nap						g45570 78	53	1086	3.6e- 95	(AC007 045) putati ve Tall-1

168416	ATU030 356	ATL8C4 6169:1 ..749	nap										g45394 62	53	971	9.4e- 93	(AL049 500) putati ve protei n [Arabi dopsis thalia na]	pol polypr oteins, 5', partia l [Arabi dopsis thalia na]
168417	ATU030 357	ATL8C4 1950:2 561..1	nap										g41153 65	53	2500	1.0e- 271	(AC005 957) revers e transc riptas e-like protei n [Arabi dopsis thalia na]	(AC005 957) revers e transc riptas e-like protei n [Arabi dopsis thalia na]
168418	ATU030 358	ATL8C3 1336:1 3..549	nap										g29146 92	53	847	3.4e- 75	(AC003 974) hypoth etical protei n [Arabi	(AC003 974) hypoth etical protei n [Arabi

168419	ATU030 359	ATL8S4 329:52 9..1	nap										g24940 04	53	146	1.2e- 14	METHYL AMINE UTILIZ ATION PROTEI N MAUG PRECUR SOR [Methy lophil us methylo troph us]	dopsis thalia nal
168420	ATU030 360	ATL8C3 157:11 53..1	nap										g45860 66	53	1646	2.1e- 161	(AC006 194) putati ve pol polypr oteins, 3', partia l [Arabi dopsis thalia nal]	
168421	ATU030 361	ATL8C3 1459:4 289..5 807	nap										g46894 53	53	166	2.1e- 13	(AC006 267) predic ted protei n of unknow n functi on	

168422	ATU030 362	ATL8S2 1185:1 ..294	nap								53	83	0.996	(D28113) MOBP [Homo sapiens]	[Arabi dopsis thalia na]
168423	ATU030 363	ATL8S1 1602:1 21..218	nap								53	82	4.8e-06	(AC005309) hypothetical protein [Arabi dopsis thalia na]	[Arabi dopsis thalia na]
168424	ATU030 364	ATL8C3 1685:5 25..849	nap								53	512	1.1e-31	(AL021712) hypothetical protein [Arabi dopsis thalia na]	[Arabi dopsis thalia na]
168425	ATU030 365	ATL8C3 1760:9 75..1	nap								53	842	3.4e-94	(AL049480) putative protein [Arabi dopsis thalia na]	[Arabi dopsis thalia na]

168431	370	216:1. .835	nap							07				53	299	8.6e- 30	16	134) putati ve revers e transc riptas e [Arabi dopsis thalia na]
		ATL8C1 2154:8 20..32 2	nap							g40989 68				53	299	8.6e- 30	16	(U8129 4) germin -like protei n [Arabi dopsis thalia na]
168432		ATL8S8 187:1. .158	nap							g24594 22				53	146	1.8e- 11		(AC002 332) unknow n protei n [Arabi dopsis thalia na]
168433		ATL8S1 8905:4 09..1	nap							g25651 96				53	139	0.0094		(AF000 381) non- functi onal folate bindin g
		ATU030 371																
		ATU030 372																
		ATU030 373																

168434	ATU030 374	ATL8S1 0156:1 ..351	nap										g13393 9	53	118	8.9e- 08	prote n [Homo sapien s]
168435	ATU030 375	ATL8C3 3778:1 332..8 12	nap										g37382 30	53	275	2.2e- 29	CHLORO PLAST 30S RIBOSO MAL PROTEI N S3 [Nicot iana tabacu m] (AB007 790) DREB2A [Arabi dopsis thalia na]
168436	ATU030 376	ATL8C4 7075:7 84..1	nap										g23885 65	53	423	2.4e- 46	(AC000 098) Simila r to Prunus pectin estera se (gb X9 5991). [Arabi dopsis thalia na]
168437	ATU030 377	ATL8S1 8182:1 ..403	nap										g45879 94	53	571	1.6e- 48	(AF085 279) hypoth

168438	ATU030 378	ATL8C1 3932:4 41..17 31	nap										g34137 01	53	777	1.0e- 78	etical protei n [Arabi dopsis thalia na]
168439	ATU030 379	ATL8C1 7965:4 60..1	nap										g48952 24	53	457		(AC007 660) putati ve revers e transc riptas e [Arabi dopsis thalia na]
168440	ATU030 380	ATL8C4 3829:1 080..3 61	nap										g27393 73	53	666		(AC002 505) putati ve flavon ol 3- o- glucos yltran sferas

168445	ATU030 385	ATL8S1 8446:5 06..1	nap								g43357 45	53	349	7.2e- 30	lement ORF1 protei n [Arabi dopsis thalia na]
168446	ATU030 386	ATL8C3 4020:1 ..2953	nap								g32528 17	53	845	3.4e- 95	(AC006 284) putati ve hydrol ase (conta ins an estera se/lip ase/th ioeste rase active site serine domain (prosi te: PS5018 7) [Arabi dopsis thalia na] (AC004 705) putati ve MuDR protei n

168457	ATU030 397	ATL8C3 503:1. .417	nap								947339 70	53	61	0.0001 0	[Arabi dopsis thalia na] (AC007 264) hypo thetical protein [Arabi dopsis thalia na]
168458	ATU030 398	ATL8C3 3700:4 549..4 776	nap								933778 46	53	150	3.9e- 09	(AF076 274) No defini tion line found [Arabi dopsis thalia na]
168459	ATU030 399	ATL8C4 4390:3 08..93	nap								918711 79	53	119	7.6e- 09	(U9043 9) FMRFam ide precu sor isolog [Arabi dopsis thalia na]
168460	ATU030 400	ATL8S2 8232:5 12..1	nap								916533 83	53	110	0.0002 6	(D9091 3) hypo thetical

168461	ATU030 401	ATL8S2 6851:4 72...26 5	nap										g15506 83	53	165		prote n [Synec hocyst is sp.] (Z8022 5) hypoth etical protei n Rv2642 [Mycob acteri um tuberc ulosis]
168462	ATU030 402	ATL8C1 5340:6 04..1	nap										g18002 81	53	848	2.6e- 81	(U8208 6) polyub iquiti n [Fraga ria x ananas sa]
168463	ATU030 403	ATL8S1 5738:4 49..13 7	nap										g44553 51	53	182	1.9e- 14	(AL035 524) putati ve protei n [Arabi dopsis thalia na]
168464	ATU030 404	ATL8S2 0530:5	nap										g40564 57	53	196	1.2e- 19	(AC005 990)

[illegible]

168480	ATU030 420	ATL8C9 059:13 55..1	nap							g44163 01	53	1648		[Arabi dopsis thalia na]
168481	ATU030 421	ATL8C4 1980:2 051..2 303	nap							g45593 86	53	146	6.8e- 12	(AF105 716) gag protei n [Zea mays]
168482	ATU030 422	ATL8S2 335:1. .578	nap							g30215 06	53	506	1.4e- 50	(AC006 526) putati ve polyga lactur onase [Arabi dopsis thalia na]
168483	ATU030 423	ATL8C1 4966:1 ..526	nap							g31526 05	53	402	4.2e- 40	(X9672 7) isocit rate dehydr ogenas e (NAD+) [Nicot iana tabacu m]
														(AC004 482) hypoeth etical protei n

168484	ATU030 424	ATL8C3 5115:1 ..830	nap							948039 38	53	1264	5.4e- 106	[Arabi dopsis thalia na] (AC006 264) putati ve aromat ic amino acid permea se [Arabi dopsis thalia na]
168485	ATU030 425	ATL8C1 2360:1 70..82 2	nap						ATL8C1 2360:2 14..75 2	g36177 42	52	236	8.3e- 20	(AC005 687) RAP2.6 [Arabi dopsis thalia na]
168486	ATU030 426	ATL8C5 764:73 5..1	nap							g40380 60	53	121		(AC005 897) putati ve protei n [Arabi dopsis thalia na]
168487	ATU030 427	ATL8C4 9875:1 207..3 08	nap						ATL8C4 9875:1 153..3 41	g42638 21	52	890	4.1e- 86	(AC006 067) hypoth etical protei

168491	ATU030 431	ATL8C5 865:1. .507	nap							ATL8C5 865:18 8..504	0.97	g43097 03	52	600			n gb X92 205 from Petuni a hybrid a. [Arabi dopsis thalia na]
168492	ATU030 432	ATL8C4 0994:1 ..700	nap							ATL8C4 0994:4 7..659	0.96	g48502 85	52	560	2.7e- 49		(AL049 876) putati ve protei n [Arabi dopsis thalia na]
168493	ATU030 433	ATL8C3 7816:3 62..17 16	nap							ATL8C3 7816:3 62..17 16	0.96	g34260 44	52	480	7.5e- 44		(AC005 168) putati ve AIG1 protei

168494	ATU030 434	ATL8C3 5630:7 28..14	nap							ATL8C3 5630:6 79..14	0.95	g29094 59	52	674	5.8e- 36	n [Arabi dopsis thalia nal] (AL021 929) cobQ [Mycob acteri um tuberc ulosis]
168495	ATU030 435	ATL8C4 9954:1 942..1	nap							ATL8C4 9954:1 874..4 53	0.94	g42180 11	52	483	1.8e- 41	(AC006 135) putati ve protei n kinase [Arabi dopsis thalia nal]
168496	ATU030 436	ATL8C3 0726:7 71..18 1	nap							ATL8C3 0726:7 67..18 1	0.93	g45103 98	52	315	1.2e- 31	(AC006 587) hypoth etical protei n [Arabi dopsis thalia nal]
168497	ATU030 437	ATL8C3 3679:2 206..1	nap							ATL8C3 3679:2 193..1 105	0.93	g37859 84	52	1836	5.4e- 183	(AC005 560) putati ve revers

168498	ATU030 438	ATL8S2 4098:5 83..1	nap					ATL8S2 4098:4 90..60	0.91	g11759 38	52	179	9.2e- 20	e transc riptas e [Arabi dopsis thalia na]
168499	ATU030 439	ATL8C4 325:1. .1038	nap					ATL8C4 325:58 ..1038	0.91	g42621 53	52	1111	1.0e- 73	(AC005 275) putati ve DNA- bindin g protei n [Arabi dopsis thalia na]
168500	ATU030 440	ATL8C3 420:81 2..1	nap					ATL8C3 420:62 5..73	0.90	g27393 73	52	406	6.5e- 34	(AC002 505) putati ve flavon

168501	ATU030 441	ATL8S1 0553:1 ..471	nap					ATL8S1 0553:4 59..21 4	0.90	g11038 58	52	87	0.0009 7	(U3950 1) OrfB; IS3 family OrfB protei ns homolo g; Method : concept tual transl ation suppli ed by author . [Caulo bacter cresce ntus]	ol 3- o- glucos yltran sferas e. [Arabi dopsis thalia na]
168502	ATU030 442	ATL8S3 0176:1 ..652	nap					ATL8S3 0176:7 9..511	0.90	g42042 86	52	309	4.3e- 19	(AC003 027) Unknow n protei n	

168503	ATU030 443	ATL8C4 6451:1 ..1172	nap						ATL8C4 6451:1 03..11 22	0.89	933778 51	52	1013	2.7e- 90	[Arabi dopsis thalia na] (AF076 274) contai ns simila rity to ATPase s associ ated with variou s cellul ar activi ties (Pfam: AAA.hm m, score: 155.05) [Arabi dopsis thalia na]
168504	ATU030 444	ATL8C3 5693:2 110..1	nap						ATL8C3 5693:1 985..7 51	0.89	949143 61	52	1978	1.4e- 180	(AC007 289) putati ve revers e transc riptas

168505	ATU030 445	ATL8C4 5450:7 65..34 9	nap					ATL8C4 5450:5 70..38 1	0.89	g27393 87	52	484	6.7e- 44	e [Arabi dopsis thalia na]
168506	ATU030 446	ATL8S1 728:45 3..38	nap					ATL8S1 728:34 9..184	0.89	g73024 5	52	161	1.1e- 11	(AC002 505) hypoth etical protei n [Arabi dopsis thalia na]
168507	ATU030 447	ATL8S2 7571:5 39..10 6	nap					ATL8S2 7571:4 15..15 2	0.89	g41917 96	52	364	4.8e- 34	TREHAL OSE- PHOSPH ATASE (TREHA LOSE 6- PHOSPH ATE PHOSPH ATASE) (TPP) [Esche richia coli]
														(AC005 917) putati ve senesc ence- associ ated protei n 5

168508	ATU030 448	ATL8C3 60:218 8..110 7	nap				ATL8C3 60:207 4..110 7	0.88	g26739 16	52	83	0.42	[Arabi dopsis thalia na] (AC002 561) hypoth etical protei n [Arabi dopsis thalia na]
168509	ATU030 449	ATL8C4 3337:1 ..1262	nap				ATL8C4 3337:8 4..112 3	0.88	g42493 77	52	729		(AC005 966) Simila r to [Arabi dopsis thalia na]
168510	ATU030 450	ATL8C2 321:13 89..1	nap				ATL8C2 321:11 70..21 7	0.87	g17861 15	52	875	8.4e- 79	(U8525 0) phosph oinosi tide- specif ic phosph olipas e C [Vigna unguic ulata]
168511	ATU030 451	ATL8C1 9054:9 13..31 7	nap				ATL8C1 9054:7 26..32 2	0.87	g45859 64	52	197	0.997	(AC005 287) hypoth etical protei

168512	ATU030 452	ATL8C4 037:20 99...11 12	nap					ATL8C4 037:18 19...11 12	0.87	g45811 12	52	157	6.6e- 07	n [Arabi dopsis thalia na] (AC005 825) putati ve zinc finger protei n [Arabi dopsis thalia na]
168513	ATU030 453	ATL8C1 2631:5 12...1	nap					ATL8C1 2631:4 99...15	0.87	g43253 41	52	825	6.3e- 85	(AF128 393) simila r to the Drosop hila DES-1 protei n (GB:X9 4180) [Arabi dopsis thalia na]
168514	ATU030 454	ATL8C1 6944:4 058...2 195	nap					ATL8C1 6944:3 508...2 195	0.86	g35488 06	52	1285	3.3e- 82	(AC005 313) unknow n protei n [Arabi

168519	ATU030 459	ATL8C4 7957:7 ..1359	nap					ATL8C4 7957:7 ..1062	0.85	g45859 77	52	559	9.0e- 35	protei n [Arabi dopsis thalia na] (AC005 287) Unknow n protei n [Arabi dopsis thalia na]
168520	ATU030 460	ATL8C4 9468:1 ..1000	nap					ATL8C4 9468:3 46..89 5	0.84	g33866 21	52	325	4.6e- 27	(AC004 665) unknow n protei n [Arabi dopsis thalia na]
168521	ATU030 461	ATL8C4 8647:1 101..1	nap					ATL8C4 8647:9 55..22	0.84	g42204 91	52	533	4.7e- 55	(AC006 069) hypoth etical protei n [Arabi dopsis thalia na]
168522	ATU030 462	ATL8S2 6076:4 89..1	nap					ATL8S2 6076:4 21..32	0.84	g41042 38	52	177	1.6e- 18	(AF034 414) outer membra

168523	ATU030 463	ATL8C3 4005:8 10..1	nap						ATL8C3 4005:7 94..96	0.83	g37639 31	52	641	5.7e- 61	(AC004 450) hypoth etical protei n [Arabi dopsis thalia na]
168524	ATU030 464	ATL8C3 6835:2 768..3 895	nap						ATL8C3 6835:2 768..3 510	0.83	g40564 18	52	441	2.8e- 36	(AC005 322) T7A14. 5 [Arabi dopsis thalia na]
168525	ATU030 465	ATL8S1 5993:4	nap						ATL8S1 5993:4	0.83	g33778 12	52	219	2.8e- 14	(AF076 275)

168527	ATU030 467	ATL8C3 4079:5 44..23 36	nap						ATL8C3 4079:5 55..17 32, ATL8C3 4079:2 297..2 036	0.83, 0.90			g30565 88	52	1886	2.3e- 183	(AC004 255) T1F9.9 [Arabi dopsis thalia nal]
168528	ATU030 468	ATL8C1 6413:1 ..1729	nap						ATL8C1 6413:1 22..14 17	0.82			g45805 75	52	609	2.0e- 56	(AF082 176) auxin respon se factor 9 [Arabi dopsis thalia nal]
168529	ATU030 469	ATL8S1 3:591. .1	nap						ATL8S1 3:427. .279	0.82			g45444 06	52	344	1.2e- 29	(AC006 955) hypoth etical protei n [Arabi dopsis thalia nal]

168530	ATU030 470	ATL8S3 0482:5 50..17	nap			ATL8S3 0482:3 55..17	0.82	g17698 99	52	183	3.8e- 16	(Y0801 0) lectin recept or kinase [Arabi dopsis thalia na]
168531	ATU030 471	ATL8S2 1583:1 ..354	nap			ATL8S2 1583:1 2..354	0.82	g24400 24	52	277	3.3e- 23	(Y1373 2) urease access ory protei n [Ralst onia eutrop ha]
168532	ATU030 472	ATL8C7 777:17 07..1	nap			ATL8C7 777:16 83..1	0.81	g10762 74	52	660	7.8e- 66	cucumi sin (EC 3.4.21 .25) precu sor - muskm lon (fragn ent) []
168533	ATU030 473	ATL8C2 8964:1 ..1366	nap			ATL8C2 8964:6 6..135 3	0.81	g25650 11	52	1575	1.3e- 141	(AC002 983) putati ve MuDR- A-like transp

168534	ATU030 474	ATL8C3 9459:6 09..1	nap						0.81	945305 91	52	179	3.7e- 20	oson protei n [Arabi dopsis thalia na]
168535	ATU030 475	ATL8S1 9124:4 26..13 1	nap						0.79	931933 15	52	82	0.0008 5	(AF069 299) contai ns simila rity to transc riptio nal activa tor Ra [Arabi dopsis thalia na]
168536	ATU030 476	ATL8S5 565:74 4..1	nap						0.79	921297 59	52	652	4.8e- 69	UDPglu cose 4- epimer ase (EC 5.1.3. 2) -

168547	ATU030 487	ATL8C9 643:89 1..1	nap					0.74	g30803 93	52	1038	3.3e- 108	(AL022 603) NADH dehydr ogenas e like protei n [Arabi dopsis thalia nal]	A reduta se [Strep tomyce s coelic olor]
168548	ATU030 488	ATL8C3 5090:1 955..3 06	nap					ATL8C3 5090:1 870..3 06	g31222 75	52	156	3.5e- 06	PUTATI VE BRANCH ED- CHAIN AMINO ACID AMINOT RANSFE RASE (TRANS AMINAS E B) (BCAT) [Archaeo globus fulgidus]	
168549	ATU030	ATL8C8	nap					ATL8C8	g10027	52	606	1.9e-	(U3391	

168550	489	028:44 7..193 7	nap				028:49 0..186 0	98	52	420	1.7e- 36	59	6) Cpm5 [Crate rostig ma planta gineum]
	ATU030 490	ATL8S2 5787:1 ..603	nap				ATL8S2 5787:1 98..57 6	g21206 41	52	420	1.7e- 36		pilu protei n - Pseudo monas aerugi nosa [Pseud omonas aerugi nosa]
168551	ATU030 491	ATL8C6 177:18 53..1	nap				ATL8C6 177:16 15..23 6	g44163 02	52	2515	1.5e- 223		(AF105 716) copia- type pol polypr otein [Zea mays]
168552	ATU030 492	ATL8S2 1077:3 83..1	nap				ATL8S2 1077:3 77..33	g41799 5	52	287	3.5e- 11		THIF PROTEI N []
168553	ATU030 493	ATL8C2 3321:4 467..1	nap				ATL8C2 3321:4 467..4 3	g33778 16	52	1711	8.0e- 168		(AF076 275) contai ns simila rity to Arabid opsis

168554	ATU030 494	ATL8C6 014:55 8..1	nap						ATL8C6 014:52 4..4	0.71	g39804 18	52	328	3.7e- 34	thalia na retrot ranspo son Athila (GB:X8 1801) [Arabi dopsis thalia na]
168555	ATU030 495	ATL8C3 9363:7 7..150 3	nap						ATL8C3 9363:7 27..12 99	0.71	g32427 20	52	235	3.6e- 17	(AC003 040) putati ve acetone- cyanohydrin lyase [Arabi dopsis thalia na]
168556	ATU030 496	ATL8C1 2274:1 251..1	nap						ATL8C1 2274:1 208..1	0.71	g43762 03	52	410	2.1e- 45	(U3522 6) putati

168557	ATU030 497	ATL8C3 5930:1 ..1707	nap				93	ATL8C3 5930:3 95..17 07	0.71	g34618 39	52	1056	3.0e- 75	ve cytoch rome P-450 [Nicot iana plumba ginifo lia]
168558	ATU030 498	ATL8S4 207:1. .499	nap					ATL8S4 207:58 ..483	0.70	g30368 90	52	248	6.7e- 25	(AL022 374) putati ve two- compon ent regula tor [Strep tomyce s coelic olor]
168559	ATU030 499	ATL8C2 204:1. .1210	nap					ATL8C2 204:46 ..1201	0.70	g42638 30	52	1137	1.1e- 82	(AC006 067) hypothe tical

168560	ATU030 500	ATL8C7 724:1. .1570	nap				ATL8C7 724:23 7..152 9	0.70	g22449 63	52	735	1.5e- 85	prote n [Arabi dopsis thalia na] (Z9734 0) hypoth etical protei n [Arabi dopsis thalia na]
168561	ATU030 501	ATL8C1 4335:1 607..1	nap				ATL8C1 4335:1 607..9 3	0.70	g34260 44	52	441	7.5e- 35	(AC005 168) putati ve AIG1 protei n [Arabi dopsis thalia na]
168562	ATU030 502	ATL8C1 4843:1 226..1	nap				ATL8C1 4843:9 82..21 2	0.69	g41851 39	52	629	7.4e- 61	(AC005 724) putati ve diacyl glycer ol kinase [Arabi dopsis thalia na]
168563	ATU030	ATL8C1	nap				ATL8C1	0.69	g46626	52	267	3.5e-	(AC007

168566	ATU030 506	ATL8S2 8461:1 ..575	nap					ATL8S2 8461:3 7..516	0.69	g29840 28	52	235	1.9e- 15	polypr otein [Arabi dopsis thalia na] (AE000 752) flagel lar P- ring protei n FlgI [AQUIF ex aeolic us]
168567	ATU030 507	ATL8C4 9981:1 ..769	nap					ATL8C4 9981:4 5..760	0.67	g28092 53	52	122	2.9e- 07	(AC002 560) F21B7. 22 [Arabi dopsis thalia na]
168568	ATU030 508	ATL8C2 7033:9 59..1	nap					ATL8C2 7033:9 59..7	0.67	g13524 58	52	1048	1.8e- 105	INOSIN E-5'- MONOPH OSPHAT E DEHYDR OGENAS E (IMP DEHYDR OGENAS E) (IMPDH) (IMPD) []

168569	ATU030 509	ATL8C1 7971:1 ..2024	nap			ATL8C1 7971:7 7..200 4	0.66	g43097 48	52	1262	(AC006 217) hypoth etical protein [Arabi dopsis thalia na]
168570	ATU030 510	ATL8C4 8391:1 181..1	nap			ATL8C4 8391:1 181..1 20	0.65	g25650 11	52	1950	(AC002 983) putati ve MuDR- A-like transp oson protein [Arabi dopsis thalia na]
168571	ATU030 511	ATL8S3 744:1. .660	nap			ATL8S3 744:52 6..83	0.65	g15727 66	52	189	(U7084 9) F29B9. 4 gene product [Caeno rhabdi tis elegan s]
168572	ATU030 512	ATL8C9 011:1. .1326	nap			ATL8C9 011:10 ..1326	0.65	g31526 12	52	1453	(AC004 482) hypoth etical protein

168573	ATU030 513	ATL8S2 6520:4 85..1	nap						ATL8S2 6520:4 85..27	0.64	g38614 05	52	329		n [Arabi dopsis thalia na]
															(AJ235 273) COPROP ORPHYR INOGEN III OXIDAS E PRECUR SOR (hemF) [Ricke ttsia prowaz ekil]
168574	ATU030 514	ATL8C1 5730:6 09..18 77	nap						ATL8C1 5730:6 09..18 54	0.64	g44907 47	52	345	9.8e- 17	(AL035 708) DnaJ- like protei n [Arabi dopsis thalia na]
168575	ATU030 515	ATL8C2 8947:1 168..1	nap						ATL8C2 8947:1 168..6 5	0.64	g33554 74	52	315	3.5e- 27	(AC004 218) unknow n protei n [Arabi dopsis thalia na]

168576	ATU030 516	ATL8S1 9052:5 35..1	nap				ATL8S1 9052:4 70..45	0.64	g29837 65	52	348	1.0e- 34	(AE000 736) phosph ate starva tion- induci ble protei n [Aquif ex aeolic us]
168577	ATU030 517	ATL8C4 8574:1 622..1	nap				ATL8C4 8574:1 534..4 4	0.63	g35402 07	52	1660	7.8e- 173	(AC004 260) Putati ve protei n kinase [Arabi dopsis thalia na]
168578	ATU030 518	ATL8C4 0272:1 293..1	nap				ATL8C4 0272:1 293..1 19	0.63	g42622 11, g30803 62	52, 32	104, 477	2.3e- 08, 1.3e- 36	(AC006 161) hypoth etical protei n [Arabi dopsis thalia na]; (AL022 580) hypoth etical protei

168579	ATU030 519	ATL8C3 142:1. .1370	nap					ATL8C3 142:18 5..106 0	0.63	g45860 33	52	1107	4.0e- 124	n [Arabi dopsis thalia nal] (AC007 109) unknown n protei n [Arabi dopsis thalia nal]
168580	ATU030 520	ATL8C3 8306:1 797..1	nap					ATL8C3 8306:1 676..2 17	0.62	g28326 32	52	1115	2.1e- 96	(AL021 711) hypoth etical protei n [Arabi dopsis thalia nal]
168581	ATU030 521	ATL8C2 0591:3 488..1 480	nap					ATL8C2 0591:3 413..1 480	0.62	g34618 39	52	1070	1.6e- 89	(AC005 315) putati ve recept or protei n kinase [Arabi dopsis thalia nal]
168582	ATU030 522	ATL8S2 1087:5	nap					ATL8S2 1087:5	0.62	g45858 54	52	356	3.2e- 33	(AJ237 976)

168583	ATU030 523	ATL8C4 5139:1 ..501	nap					27..78	0.61	g21911 91	52	110	8.2e- 08	(AF007 271) A TM02 1B04.1 4 gene produc t [Arabi dopsis thalia nal]	hypoth etical protei n [Strep tomyce s coelic olor]
168584	ATU030 524	ATL8C2 0336:3 42..1	nap					ATL8C2 0336:2 88..49	0.60	g32984 41	52	306	6.5e- 28	(AB010 879) chloro plast riboso mal protei n L10 [Nicot iana tabacu m]	hypoth etical protei n L10 [Nicot iana tabacu m]
168585	ATU030 525	ATL8C3 6827:1 ..2495	nap					ATL8C3 6827:5 6..229 2	0.59	g42638 25	52	2157	2.9e- 223	(AC006 067) hypoth etical protei n [Arabi dopsis]	(AC006 067) hypoth etical protei n [Arabi dopsis]

168586	ATU030 526	ATL8C6 458:13 58..1	nap				ATL8C6 458:12 89..35	0.58	g48877 60	52	153	2.8e- 14	thalia na] (AC006 533) putati ve ARI,RI NG finger protei n [Arabi dopsis thalia na]
168587	ATU030 527	ATL8C1 176:1. .1405	nap				ATL8C1 176:42 9..118 1	0.58	g14350 70, g45811 64	52, 45	95, 621	0.0037 , 3.6e- 67	(X9908 5) integr ase [Ascob olus immers us]; (AC006 220) putati ve polypr otein [Arabi dopsis thalia na]
168588	ATU030 528	ATL8S1 1724:1 ..538	nap				ATL8S1 1724:5 36..16 9	0.57	g26331 27	52	268	1.4e- 25	(Z9910 8) simila r to hypothe tical protei

168589	ATU030 529	ATL8C2 6044:2 170..2 76	nap					ATL8C2 6044:9 35..27 6	0.56	g44552 99	52	419	5.9e- 45	[AL035 528) putati ve protei n [Arabi dopsis thalia na]	ns [Bacil lus subtil is]
168590	ATU030 530	ATL8C5 0221:1 ..624	nap					ATL8C5 0221:2 7..551	0.54	g18813 48	52	168	5.3e- 17	(AB001 488) POBABL E SENSOR Y TRANSD UCTION HISTID INE KINASE . [Bacil lus subtil is]	
168591	ATU030 531	ATL8C1 7290:1 ..2487	nap					ATL8C1 7290:1 346..1 872	0.54	g22448 88, g21905 54	52, 50	745, 689	7.1e- 79, 2.3e- 71	(Z9733 8) simila rity to cytoch rome P450 [Arabi	

168592	ATU030 532	ATL8C3 5048:2 458..1	nap						ATL8C3 5048:2 357..4 9	0.53	936000 44	52	2445	6.6e- 248	dopsis thalia nal; (AC001 229) Simila r to Arabid opsis cytoch rome P450 CYP90 (gb X8 7367). [Arabi dopsis thalia nal]
168593	ATU030 533	ATL8C1 9749:1 173..1	nap						ATL8C1 9749:1 173..4 4	0.52	945824 53	52	591	3.2e- 58	(AC007 071) unknow n protei n [Arabi dopsis

168597	ATU030 537	ATL8S3 552:56 8..1	nap				ATL8S3 552:56 2..71	0.49	g44550 77	52	116	8.9e- 06	(AF119 621) DitF [Pseud omonas abietal niphila]
168598	ATU030 538	ATL8S2 3973:1 ..574	nap				ATL8S2 3973:4 99..38	0.48	g38609 74	52	459	5.3e- 34	(AJ235 271) PHENYL ALANYL -TRNA SYNTHETASE ALPHA CHAIN (pheS) [Rickea tsia prowaz ekii]
168599	ATU030 539	ATL8C4 9864:3 030..1	nap				ATL8C4 9864:3 030..9 23	0.48	g43887 23	52	761	2.4e- 77	(AC006 413) hypoth etical protein [Arabi dopsis thaliana]
168600	ATU030 540	ATL8C3 6338:9 18..1	nap				ATL8C3 6338:8 13..79	0.48	g18991 88	52	553	1.8e- 57	(U9021 2) DNA bindin g protein [ACBF Nicotiana]

168601	ATU030 541	ATL8C5 84:934 ..77	nap				ATL8C5 84:470 ..77	0.48	g41159 31	52	1073	2.3e- 121	(AF118 223) contai ns simila rity to Guilla rdia theta ABC transp orter (GB:AF 041468) [Arabi dopsis thalia na]
168602	ATU030 542	ATL8C2 3426:1 981..1	nap				ATL8C2 3426:1 971..1 438	0.47	g47139 49	52	1000	3.4e- 45	(AC007 293) unknow n protei n [Arabi dopsis thalia na]
168603	ATU030 543	ATL8S8 168:1. .449	nap				ATL8S8 168:57 ..439	0.47	g54441 6	52	95	0.997	GLYCIN E-RICH RNA- BINDIN G PROTEI N 10 [Brass

168604 ATU030 544

168604	ATU030 544	ATL8C6 89:995 .1	nap				ATL8C6 89:842 .129	0.47	g31525 98	52	1111	2.8e- 109	ica napus] (AC002 986) Contai ns simila rity to C2- HC type zinc finger protei n C.e- MyT1 gb U67 079 from C. elegan s and to hypers ensiti vity- relate d gene 201 isolog T28M21 .14 from A. thalia na BAC gb AF0 02109. [Arabi dopsis
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168609	ATU030 549	ATL8C1 9764:7 09..1	nap						ATL8C1 9764:7 09..19	0.45	g34452 10	52	739	6.1e- 75	osase [Arabi dopsis thalia na] (AC004 786) putati ve flavon ol 3- o- glucos yltran sferas e [Arabi dopsis thalia na]
168610	ATU030 550	ATL8C4 3097:1 ..1362	nap						ATL8C4 3097:4 4..976	0.44	g45393 94	52	597	5.8e- 61	(AL035 526) putati ve protei n [Arabi dopsis thalia na]
168611	ATU030 551	ATL8C1 7019:1 352..1	nap						ATL8C1 7019:1 352..4 55	0.44	g42638 30	52	1262	6.0e- 104	(AC006 067) hypoth etical protei n [Arabi dopsis thalia na]

168612	ATU030 552	ATL8C4 5937:3 30..11 07	nap			ATL8C4 5937:6 45..77 5	0.43	g38343 24	52	631	2.7e- 69	(AC005 679) Simila r to gb X92 762 tafazz ins protei n from Homo sapien s. [Arabi dopsis thalia na]
168613	ATU030 553	ATL8C3 1798:1 ..448	nap			ATL8C3 1798:1 83..44 8	0.43	g33556 17	52	86	1.6e- 08	(AJ000 229) unname d protei n produc t [Horde um vulgar el]
168614	ATU030 554	ATL8C3 0541:1 ..1107	nap			ATL8C3 0541:7 28..10 92	0.41	g45389 66	52	1518	1.1e- 151	(AL049 488) putati ve protei n [Arabi dopsis thalia na]
168615	ATU030	ATL8C3	nap			ATL8C3	0.41	g17070	52	554	4.2e-	(U7872

168616	555	089:14 25..1					089:13 77..94 7		19				51	1) hypo- thetical protein [Arabi- dopsis thaliana]
	ATU030 556	ATL8C7 790:1. .1154	nap				ATL8C7 790:26 0..105 1		g33553 08	52	817	2.5e- 85	(AJ009 695) wall- associ- ated kinase 4 [Arabi- dopsis thaliana]	
168617	ATU030 557	ATL8C3 110:1. .500	nap				ATL8C3 110:19 5..357		g46782 14	52	180	2.8e- 16	(AC007 134) hypo- thetical protein [Arabi- dopsis thaliana]	
168618	ATU030 558	ATL8S1 1624:6 57..1	nap				ATL8S1 1624:4 64..17		g47536 50	51	108	6.6e- 11	(AL049 751) putati- ve protein [Arabi- dopsis thaliana]	

168619	ATU030 559	ATL8C1 1993:5 78..1	nap						g44686 98	52	385	1.1e- 30	(AL035 591) ionic transp orter [Strep tomyce s coelic olor]
168620	ATU030 560	ATL8S2 0160:1 ..715	nap						g45843 45	52	874	7.3e- 92	(AC007 127) putati ve serine /threo nine protei n kinase [Arabi dopsis thalia na]
168621	ATU030 561	ATL8C1 4539:2 170..1	nap						g43357 36	52	2795	3.4e- 247	(AC006 248) putati ve copia polypr oteins [Arabi dopsis thalia na]
168622	ATU030 562	ATL8C3 0978:5 07..68 1	nap						g37790 23	52	76	0.16	(AC005 171) probab le splici

168623	ATU030 563	ATL8S2 3517:3 33..10 8	nap										g14028 1	52	154	3.4e- 11	HYPOTH ETICAL 16.8 KD PROTEI N (ORF 143) [Glyci ne max]	ng factor [Arabi dopsis thalia nal]
168624	ATU030 564	ATL8S2 3521:4 93..1	nap						ATL8S2 3521:4 55..17	1.00			g22262 52	51	242	3.8e- 21	(Y1408 4) hypoth etical protei n [Bacil lus subtil is]	
168625	ATU030 565	ATL8C3 1797:1 ..2473	nap										g39351 64	52	2636	4.0e- 269	(AC004 557) F17L21 .7 [Arabi dopsis thalia nal]	
168626	ATU030 566	ATL8C1 7803:1 47..35 2	nap										g28946 05	52	117		(AL021 889) putati ve protei n	

168627	ATU030 567	ATL8C4 6232:1 ..518	nap									g22450 79	52	285	1.0e- 31	[Arabi dopsis thalia na] (Z9734 3) hypoth etical protei n [Arabi dopsis thalia na]
168628	ATU030 568	ATL8S7 056:50 1..1	nap									g46782 10	52	226	1.1e- 16	(AC007 134) hypoth etical protei n [Arabi dopsis thalia na]
168629	ATU030 569	ATL8C4 6275:1 067..2 67	nap									g38853 30	52	852	3.7e- 78	(AC005 623) putati ve cytoch rome p450 protei n [Arabi dopsis thalia na]
168630	ATU030 570	ATL8C3 1058:1 926..2	nap									g34200 58	52	345	8.1e- 38	(AC004 680) unknow

168635	ATU030 575	ATL8S1 6158:6 00..19 8	nap									g25074 85	52	359	5.9e- 28	HYPOTH ETICAL 28.5 KD PROTEI N IN HPT- PAND INTERG ENIC REGION [Esche richia coli]
168636	ATU030 576	ATL8C2 5737:9 94..1	nap									g22449 49	52	420	1.1e- 42	(Z9733 9) simila rity to ORF - Lilium longif lorum [Arabi dopsis thalia na]
168637	ATU030 577	ATL8C2 5542:1 49..74 9	nap									g16196 02	52	273	3.7e- 27	(Y0872 6) MtN3 [Medic ago trunca tula]
168638	ATU030 578	ATL8C3 2750:1 ..1333	nap									g20621 59	52	144	8.1e- 09	(AC001 645) jasmon ate

168639	ATU030 579	ATL8S2 1303:1 ..530	nap							ATL8S2 1303:5 4..509	1.00	g35506 67	51	353	2.6e- 33	(AJ224 977) gentis ate 1,2- dioxyg enase [Sphin gomona s sp. RW5]	induci ble protei n isolog [Arabi dopsis thalia nal]
168640	ATU030 580	ATL8C3 8623:1 362..1 663	nap									g33778 09	52	200	2.6e- 16	(AF075 597) contai ns simila rity to SRF- type transc riptio n factor s (DNA- bindin g and dimeri zation domain	

168641	ATU030 581	ATL8C1 2302:1 448..3 57	nap									g47261 23	52	93	0.0004 8	(AC006 436) hypoth etical protei n [Arabi dopsis thalia na]
168642	ATU030 582	ATL8C1 1700:1 ..843	nap									g45811 50	52	1251	1.5e- 126	(AC006 919) hypoth etical protei n [Arabi dopsis thalia na]
168643	ATU030 583	ATL8C2 5225:1 040..1	nap									g43253 77	52	1351	9.2e- 118	(AF128 396) simila r to maize transp oson MuDR-

168644	ATU030 584	ATL8C4 9423:9 24...30 4	nap										g29470 60	52	785	3.8e- 57	like proteins [Arabis dopsis thaliana]
168645	ATU030 585	ATL8S2 4922:6 11...13 9	nap										g47419 42	52	357	6.2e- 25	(AF134 121) Ihca5 protein [Arabis dopsis thaliana]
168646	ATU030 586	ATL8C2 5201:1 611...2 033	nap										g30471 10	52	92	0.035	(AF058 919) No definition line found [Arabis dopsis thaliana]
168647	ATU030	ATL8C2	nap										g37460	52	1588	4.4e-	(AC005

[illegible]

	587	4678:5 737..1 014							69				157	311) putati ve revers e transc riptas e [Arabi dopsis thalia na]
168648	ATU030 588	ATL8C3 7781:7 93..10 4	nap						g28530 74	52	775	5.1e- 76	(AL021 768) putati ve protei n [Arabi dopsis thalia na]	
168649	ATU030 589	ATL8C1 7163:1 588..1	nap						g43245 97	52	592	1.6e- 38	(AF106 324) sodium proton exchan ger Nhxl [Arabi dopsis thalia na]	
168650	ATU030 590	ATL8C4 2056:2 178..1	nap						g47261 14, g33778 16	52, 41	113, 455	5.4e- 09, 2.2e- 45	(AC006 436) putati ve retrot ranspo son	

168654	ATU030 594	ATL8S1 4772:4 62..1	nap										g49464 5	52	96	4.7e- 08	domain (Pfam: lectin _legA. _hmm, score: 16.72) [Arabi do... []]
168655	ATU030 595	ATL8C3 5265:1 765..1 073	nap										g44552 03	52	489	1.7e- 47	Thermi tase (E.C.3 .4.21. 66) []
168656	ATU030 596	ATL8C4 6125:1 338..1	nap										g46999 44	52	723	3.6e- 55	(AC007 166) hypoth etical protei n [Arabi dopsis thalia na]
168657	ATU030 597	ATL8C2 1419:1 382..7 36	nap										g44558 00	52	444	3.2e- 31	(Z9734 3) unname d protei

168658	ATU030 598	ATL8C4 7311:7 13..14 38	nap										g34618 14	52	295	2.1e- 29	(AC004 138) hypo- thetical protein [Arabi dopsis thalia na]
168659	ATU030 599	ATL8C3 7953:1 170..1	nap										g22136 12	52	204	9.6e- 23	(AC000 103) F21J9. 6 [Arabi dopsis thalia na]
168660	ATU030 600	ATL8S2 5504:5 74..1	nap										g73204 8	52	152	3.5e- 11	HYPOTH ETICAL 40.4 KD PROTEI N IN PEPA- GNTV INTERG ENIC REGION (0366) [Esche richia coli]

168661	ATU030 601	ATL8C7 678:86 8..1	nap							g45394 30, g40564 18	52, 43	151, 99	3.1e- 15, 4.6e- 07	(AL049 171) putati ve protei n [Arabi dopsis thalia nal; (AC005 322) T7A14. 5 [Arabi dopsis thalia nal]
168662	ATU030 602	ATL8S3 927:1. .546	nap							g22752 04	52	98	2.1e- 07	(AC002 337) DNA bindin g protei n isolog [Arabi dopsis thalia nal]
168663	ATU030 603	ATL8C3 3340:1 ..1528	nap							g30565 86	52	1585	2.8e- 192	(AC004 255) T1F9.7 [Arabi dopsis thalia nal]
168664	ATU030 604	ATL8C4 3563:2 328..5	nap							g49143 61	52	256		(AC007 289) putati

168665	ATU030 605	ATL8C1 2611:1 387..6 11	nap										g46789 31	52	926	8.1e- 96	(AL049 711) serine -type carbox ypepti dase like protei n [Arabi dopsis thalia na]	ve revers e transc riptas e [Arabi dopsis thalia na]
168666	ATU030 606	ATL8S2 9852:1 57.,54 6	nap										927645 36	52	193	2.7e- 15	(AJ000 671) clavul anate- 9- aldehy de reduca tase [Strep tomyce s clavul igerus]	(AJ000 671) clavul anate- 9- aldehy de reduca tase [Strep tomyce s clavul igerus]
168667	ATU030	ATL8S4	nap										g45389	52	553	1.8e-	(AL049	(AL049

607	051:50 6..2								30	43	483) putati ve peroxi dase [Arabi dopsis thalia na]
168668	ATU030 608	ATL8C2 0177:8 42..46 07	nap						932692 83	914	1.2e- 73 (AL030 978) putati ve protei n [Arabi dopsis thalia na]
168669	ATU030 609	ATL8S4 199:1. .406	nap						933669 18	300	1.9e- 23 (AF064 654) NADH dehydr ogenas e subuni t F [Arabi dopsis thalia na]
168670	ATU030 610	ATL8C1 3113:1 ..772	nap						941651 83	145	0.0001 1 (AJ132 349) SAP1 protei n [Antir rhinum majus]
168671	ATU030	ATL8C4	nap						947739	1049	5.3e- (AF147

168672	611	442:1. .1093								20								110	259) F10A2. 17 gene produc t [Arabi dopsis thalia na]
	ATU030 612	ATL8S1 6945:5 63..1	nap							g10000 8	52	300							pectin estera se (EC 3.1.1. 11) - kidney bean (fragm ent) [Phase olus vulgar is]
168673	ATU030 613	ATL8S3 0023:1 ..675	nap							g85406 5	52	316						0.040	(X8341 3) U88 [Human herpes virus 6]
168674	ATU030 614	ATL8C2 280:16 0..614	nap							g26513 11	52	288						7.0e- 28	(AC002 336) hypoth etical protei n [Arabi dopsis thalia na]
168675	ATU030	ATL8S1	nap							g12993	52	288						1.2e-	POLYGA

	615	2988:1 ..480								7				28	LACTUR ONASE (PECTI NASE) (PGL) [Agrob acteri um tumefa ciens]
168676	ATU030 616	ATL8C2 0581:1 ..1086	nap							g41917 94	52	793	1.0e- 86	(AC005 917) putati ve zinc finger -like protei n [Arabi dopsis thalia na]	
168677	ATU030 617	ATL8C1 975:1. .1060	nap							g28276 37	52	943	4.8e- 89	(AL021 636) putati ve protei n [Arabi dopsis thalia na]	
168678	ATU030 618	ATL8C1 8499:3 439..1	nap							g30470 68, g49143 64	52, 50	1950, 757	3.1e- 164, 2.5e- 76	(AF058 825) simila r to maize transp oson	

168679	ATU030 619	ATL8C3 5593:1 216..5 59	nap										g11892 6	52	299	1.1e- 27	MuDR (GB:M7 6978) [Arabi dopsis thalia nal; (AC007 289) hypoth etical protei n [Arabi dopsis thalia nal]
168680	ATU030 620	ATL8C8 47:80. .3137	nap										g40380 56	52	1375	2.1e- 130	(AC005 897) putati ve transp oson

168681	ATU030 621	ATL8S1 2348:1 ..332	nap										g32932 39	52	375	4.0e- 29	(U9641 3) putati ve IS3- like transp osase [Agrob acteri um tumefa ciens] (AL035 523) hypoth etical protei n [Arabi dopsis thalia na]
168682	ATU030 622	ATL8C1 9383:6 15..80 5	nap										g44552 30	52	282	1.5e- 16	(AL035 523) hypoth etical protei n [Arabi dopsis thalia na]
168683	ATU030 623	ATL8C1 3303:8 42..1	nap										g31691 81	52	649	5.3e- 61	(AC004 401) putati ve casein kinase II cataly tic subuni t [Arabi dopsis thalia na]

168692	ATU030 632	ATL8S3 0314:3 67..1	nap					2	0.99	g16524 73	51	167	9.7e- 13	(D9090 5) lumQ [Synec hocyst is sp.]	PROTEI N CPRF-2 [Petro selinu m crispu m]
168693	ATU030 633	ATL8C2 8618:1 20..59 1	nap						0.99	g36000 61	51	707	2.9e- 73	(AF080 120) contai ns simila rity to DNA bindin g protei ns [Arabi dopsis thalia na]	
168694	ATU030 634	ATL8S1 1786:5 8..503	nap						0.98	g38606 91	51	167	5.8e- 12	(AJ235 270) HFLC PROTEI N (hflC) [Ricke ttsia prowaz ekii]	

168695	ATU030 635	ATL8S8 369:49 9..1	nap				ATL8S8 369:39 9..58	0.97	g38854 44	51	468	8.8e- 43	(AF040 381) yhdG homolo g [Erwin ia caroto vora]
168696	ATU030 636	ATL8C2 9504:2 455..4 5	nap				ATL8C2 9504:2 455..4 5	0.97	g47139 50	51	47	0.0001 2	(AC007 293) hypoht etical protei n [Arabi dopsis thalia na]
168697	ATU030 637	ATL8C1 355:26 14..12 82	nap				ATL8C1 355:24 05..12 82	0.97	g45126 59	51	902	1.2e- 71	(AC006 931) putati ve protei n kinase [Arabi dopsis thalia na]
168698	ATU030 638	ATL8C4 6540:9 48..14 54	nap				ATL8C4 6540:9 48..12 38	0.96	g31933 12	51	487	3.3e- 35	(AF069 299) No defini tion line found [Arabi dopsis thalia]

168699	ATU030 639	ATL8C4 0450:8 49..1	nap				ATL8C4 0450:8 10..27 9	0.95	g12163 89	51	439	8.3e- 28	(U3928 9) myrosi nase- associ ated protei n [Brass ica napus]
168700	ATU030 640	ATL8C9 888:31 07..43 22	nap				ATL8C9 888:38 94..37 87	0.93	g25650 07	51	1193	1.3e- 103	(AC002 983) predic ted transp oson protei n [Arabi dopsis thalia na]
168701	ATU030 641	ATL8C1 3586:2 061..4 001	nap				ATL8C1 3586:2 064..3 721	0.92	g48502 96	51	1324	1.1e- 121	(AL049 876) RPP1- Wsa- like diseas e resist ance protei n [Arabi dopsis thalia na]
168702	ATU030	ATL8C1	nap				ATL8C1	0.92	g55971	51	412	6.6e-	(D3855

642	2817:1 ..2075						2817:1 75..20 11		3			25	2) The hal539 protei n is relate d to cyclop hilin. [Homo sapien s]
168703	ATU030 643	ATL8C1 9:1..2 509	nap				ATL8C1 9:147. .2509	0.92	g21082 52	51	2326	1.5e- 182	(Y1022 8) P- glycop rotein -2 [Arabi dopsis thalia na]
168704	ATU030 644	ATL8C3 2139:1 752..1	nap				ATL8C3 2139:1 752..1 33	0.91	g27603 31	51	1547	1.0e- 139	(AC002 130) F1N21. 16 [Arabi dopsis thalia na]
168705	ATU030 645	ATL8S2 1368:1 ..587	nap				ATL8S2 1368:1 5..536	0.91	g27913 96	51	380	5.6e- 34	(AL021 184) hypoth etical protei n RV1462 [Mycob acteri um tuberc ulosis]

168706	ATU030 646	ATL8C2 4749:4 9..294 7	nap				ATL8C2 4749:3 60..22 81	0.91		g45393 96	51	391	7.8e- 38	J (AL035 526) myb- like protei n [Arabi dopsis thalia nal]
168707	ATU030 647	ATL8C2 9999:1 576..1	nap				ATL8C2 9999:1 227..4 19	0.90		g44163 02	51	2175	3.8e- 229	(AF105 716) copia- type pol polypr oteins [Zea mays]
168708	ATU030 648	ATL8C4 1976:1 ..2454	nap				ATL8C4 1976:1 39..24 54	0.90		g48951 65, g43253 54	51, 42	404, 1474	5.0e- 35, 2.7e- 115	(AC007 231) unknown protein n [Arabi dopsis thalia nal]; (AF128 395) contai ns simila rity to retrov irus- relate

168709	ATU030 649	ATL8C2 810:47 2..134 8	nap						ATL8C2 810:47 2..123 6	0.89	945585 64	51	1119	2.6e- 95	(AC007 138) predic ted protei n of unknow n functi on [Arabi dopsis thalia na]
168710	ATU030 650	ATL8C1 4529:1 ..873	nap						ATL8C1 4529:7 3..873	0.89	934510 75	51	320	6.7e- 25	(AL031 326) putati ve protei

168711	ATU030 651	ATL8C3 8634:1 76..18 70	nap						ATL8C3 8634:1 76..18 44	0.89	g31525 96	51	527	6.4e- 36	n [Arabi dopsis thalia na] (AC002 986) YUP8H1 2R.36 [Arabi dopsis thalia na]
168712	ATU030 652	ATL8C1 1106:1 ..611	nap						ATL8C1 1106:7 7..330	0.89	g37765 80	51	536	5.6e- 57	(AC005 388) Contai ns simila rity to TM021B 04.11 [Arabi dopsis thalia na]
168713	ATU030 653	ATL8C4 5856:1 ..1586	nap						ATL8C4 5856:5 42..13 72	0.89	g45586 66	51	367	7.4e- 44	(AC007 063) putati ve Na/H antipo rter isolog [Arabi dopsis thalia na]
168714	ATU030 654	ATL8C4 4859:2	nap						ATL8C4 4859:1	0.89	g45812 07	51	1381	2.0e- 122	(Y1791 4)

		031..6 95														cyclic nucleo tide, and calmod ulin- regula ted ion channe l [Arabi dopsis thalia na]
168715	ATU030 655	ATL8C3 6745:8 24..1	nap					ATL8C3 6745:7 51..15 1	0.88		g45672 51	51	333	3.3e- 35	(AC007 070) unknow n protei n [Arabi dopsis thalia na]	
168716	ATU030 656	ATL8C2 243:43 1..982	nap					ATL8C2 243:43 1..949	0.88		g22451 38	51	296	1.3e- 18	(Z9734 4) hypoth etical protei n [Arabi dopsis thalia na]	
168717	ATU030 657	ATL8C9 051:1. .1293	nap					ATL8C9 051:18 8..123 3	0.87		g31579 45	51	484		(AC002 131) Contai ns simila	

[illegible]

168718	ATU030 658	ATL8C8 497:1. .1574	nap						0.86	g47739 08, g36953 99	51, 31	1260, 459	3.4e- 115, 1.6e- 75	(AF147 259) No defini tion line found [Arabi dopsis thalia nal; (AF096 372) contai ns simila rity to Arabid opsis thalia na retrot ranspo son Athila	ality to axi l gene gb X80 301 from Nicoti ana tabacu m. [Arabi dopsis thalia nal
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168719	ATU030 659	ATL8S1 5179:1 62..51 5	nap					ATL8S1 5179:2 05..30 5	0.86	g32583 99	51	242	2.7e- 22	(GB:X8 1801) [Arabi dopsis thalia nal] (AP000 007) 227aa long hypoeth etical phosph oribos ylform ylglyc inamid ine syntha se I [Pyroc occus horiko shi]]
168720	ATU030 660	ATL8C3 1716:1 975..1	nap					ATL8C3 1716:1 934..8 67	0.86	g33193 60	51	1557	2.1e- 149	(AF077 408) contai ns simila rity to Vicia faba retrot ranspo son- like gene (GB:AB 007467

168721	ATU030 661	ATL8C3 8979:7 96..1	nap						ATL8C3 8979:7 68..58	0.84	g28092 34	51	639	5.7e- 63	[Arabi dopsis thalia na] (AC002 560) F21B7. 3 [Arabi dopsis thalia na]
168722	ATU030 662	ATL8C3 6520:2 664..1	nap						ATL8C3 6520:2 664..6 77	0.83	g34260 44	51	619	5.1e- 61	(AC005 168) putati ve AIG1 protei n [Arabi dopsis thalia na]
168723	ATU030 663	ATL8C2 8602:1 ..856	nap						ATL8C2 8602:1 42..85 6	0.83	g45876 78	51	215	2.3e- 26	(AC007 197) putati ve diseas e resist ance gene, 5' partia l [Arabi dopsis thalia na]

168724	ATU030 664	ATL8S2 6494:4 16..1	nap				ATL8S2 6494:3 49..56	0.83	g47739 10	51	218	(AF147 259) No definition line found [Arabi dopsis thalia nal]
168725	ATU030 665	ATL8C2 5374:6 69..28 95	nap				ATL8C2 5374:1 090..2 562	0.83	g30803 99	51	1553	(AL022 603) VP1 like protei n [Arabi dopsis thalia nal]
168726	ATU030 666	ATL8C1 4103:1 ..1177	nap				ATL8C1 4103:4 3..108 8	0.83	g44552 25	51	1135	(AL035 440) putati ve protei n [Arabi dopsis thalia nal]
168727	ATU030 667	ATL8C6 53:868 4..562 7	nap				ATL8C6 53:868 4..562 7	0.82	g25006 25	51	970	DNA- DIRECT ED RNA POLYME RASE I 135 KD POLYPE PTIDE (RNA)

168728	ATU030 668	ATL8C7 208:22 60..41 47	nap				ATL8C7 208:40 67..30 84	0.81	g42630 63	51	1022	7.7e- 94	POLYMERASE I SUBUNIT 2) (RPA135) [Musculus]
168729	ATU030 669	ATL8C1 1403:1 879..1	nap				ATL8C1 1403:1 092..1 45	0.81	g11849 53	51	609	1.4e- 49	(U46574) protein farnesyl transferase beta subunit [Arabidopsis thaliana]
168730	ATU030 670	ATL8S1 7232:4 01..1	nap				ATL8S1 7232:4 01..24 3	0.80	g27317 60	51	122	1.2e- 06	(AF014397) 30S subunit ribosome

168731	ATU030 671	ATL8C1 9414:2 324..1	nap					ATL8C1 9414:2 324..4 8	0.80	g43888 30	51	1768	1.5e- 151	(AC006 528) hypoth etical protei n [Arabi dopsis thalia na]
168732	ATU030 672	ATL8C2 3620:1 475..5 34	nap					ATL8C2 3620:1 322..7 73	0.80	g36430 88	51	122	1.2e- 09	(AF075 581) protei n phosph atase- 2C; PP2C [Mesem bryant hemum crysta llinum]
168733	ATU030 673	ATL8C3 058:87 6..1	nap					ATL8C3 058:66 2..32	0.80	g29795 49	51	552	4.8e- 55	(AC003 680) putati ve 7- ethoxy coumar in O- deethyl lase

168734	ATU030 674	ATL8C4 99:1.. 2155	nap				ATL8C4 99:679 ..2097	0.79	g45875 33	51	270	1.5e- 22	[Arabi dopsis thalia na] (AC007 060) EST gb AA7 21821 comes from this gene. [Arabi dopsis thalia na]
168735	ATU030 675	ATL8C7 0:1608 ..1	nap				ATL8C7 0:1586 ..256	0.79	g45220 09	51	475	2.6e- 30	(AC007 069) unknow n protei n [Arabi dopsis thalia na]
168736	ATU030 676	ATL8C1 1170:1 ..766	nap				ATL8C1 1170:7 7..748	0.79	g28326 36	51	584	3.9e- 57	(AL021 711) hypothe tical protei n [Arabi dopsis thalia na]
168737	ATU030 677	ATL8C1 5802:1 328..1	nap				ATL8C1 5802:1 182..1	0.79	g24627 45	51	624	6.3e- 60	(AC002 292) Hypoth

168738	ATU030 678	ATL8C4 9601:1 555..2 79	nap					31	0.78	g34618 15	51	610	2.4e- 63	etical protei n [Arabi dopsis thalia nal] (AC004 138) hypoth etical protei n [Arabi dopsis thalia nal]
168739	ATU030 679	ATL8C3 9268:1 ..1916	nap					ATL8C3 9268:1 153..1 731	0.78	g42636 58	51	430	5.6e- 19	(AC006 136) hypoth etical protei n [Arabi dopsis thalia nal]
168740	ATU030 680	ATL8C3 270:83 1..485 3	nap					ATL8C3 270:83 9..371 5	0.78	g48951 65, g38057 69	51, 48	645, 1076	1.6e- 31, 4.9e- 105	(AC007 231) unknow n protei n [Arabi dopsis thalia nal]; (AC005 693) putati

168741	ATU030 681	ATL8C4 0063:1 ..776	nap					ATL8C4 0063:7 8..743	0.77	g42205 14	51	745	5.6e- 79	(AL035 356) putati ve protei n [Arabi dopsis thalia na]
168742	ATU030 682	ATL8S2 483:59 6..1	nap					ATL8S2 483:45 5..262	0.77	g29245 21	51	809	9.9e- 62	(AL022 023) putati ve protei n [Arabi dopsis thalia na]
168743	ATU030 683	ATL8C4 6127:5 889..1 724	nap					ATL8C4 6127:5 835..4 019	0.77	g42636 55	51	1239	8.3e- 110	(AC006 136) putati ve revers e transc riptas e [Arabi dopsis

168744	ATU030 684	ATL8C4 6079:1 ..2239	nap				ATL8C4 6079:8 7..223 9	0.76	g42638 27	51	1876	4.5e- 194	thalia na] (AC006 067) putati ve recept or protei n kinase [Arabi dopsis thalia na]
168745	ATU030 685	ATL8C2 9559:6 01..90	nap				ATL8C2 9559:4 40..21 9	0.76	g48352 27	51	682	1.3e- 65	(AL049 862) glycos yltran sferas e-like protei n [Arabi dopsis thalia na]
168746	ATU030 686	ATL8C4 402:61 3..386 5	nap				ATL8C4 402:61 3..369 6	0.76	g42638 25	51	2786	1.4e- 274	(AC006 067) hypoth etical protei n [Arabi dopsis thalia na]
168747	ATU030 687	ATL8C7 085:1. .1277	nap				ATL8C7 085:63 ..1205	0.75	g48951 86	51	916	3.8e- 101	(AC007 661) putati

168748	ATU030 688	ATL8S4 297:49 8..63	nap					ATL8S4 297:33 4..153	0.75	g46782 10	51	162	1.3e- 11	(AC007 134) hypoth etical protei n [Arabi dopsis thalia na]
168749	ATU030 689	ATL8C1 4169:3 91..94 8	nap					ATL8C1 4169:4 59..71 4	0.74	g45824 55	51	166	2.4e- 14	(AC007 071) putati ve rece pt or protei n kinase [Arabi dopsis thalia na]
168750	ATU030 690	ATL8C1 7203:1 ..2125	nap					ATL8C1 7203:9 4..142 4	0.74	g37790 21	51	2137	1.1e- 218	(AC005 171) putati ve revers e transc

168751	ATU030 691	ATL8C2 9855:1 ..1237	nap					ATL8C2 9855:6 4..117 8	0.74	g33675 76	51	162	2.5e- 15	AL031 (135) NAM / CUC2 - like protei n [Arabi dopsis thalia na]
168752	ATU030 692	ATL8C1 8027:2 340..1	nap					ATL8C1 8027:2 289..6 2	0.74	g46894 73	51	1382	5.7e- 112	(AC007 213) putati ve recept or protei n kinase [Arabi dopsis thalia na]
168753	ATU030 693	ATL8C3 5384:2 304..1	nap					ATL8C3 5384:2 076..4 6	0.73	g39246 09	51	2955	1.1e- 284	(AF069 442) putati ve polyp rotein of LTR transp oson [Arabi

168754	ATU030 694	ATL8C1 0741:1 434..7 41	nap					ATL8C1 0741:1 371..7 41	0.73	g21296 36	51	728	2.7e- 75	lipase - Arabid opsis thalia na [Arabi dopsis thalia na]
168755	ATU030 695	ATL8C4 9466:1 016..1	nap					ATL8C4 9466:1 016..1 9	0.73	g54973 6	51	61	0.97	HYPOTH ETICAL 49.7 KD PROTEI N IN GIN2- STE3 INTERG ENIC REGION [Sacch aromyc es cerevi siae]
168756	ATU030 696	ATL8C1 5051:1 ..1886	nap					ATL8C1 5051:1 62..18 86	0.73	g30212 72	51	1488	1.6e- 144	(AL022 347) serine /threo nine kinase - like protei n [Arabi dopsis

168757	ATU030 697	ATL8C4 7641:1 230..2 085	nap					ATL8C4 7641:1 230..2 075	0.72	g22136 15	51	540	1.3e- 56	thalia na] (AC000 103) F21J9. 9 [Arabi dopsis thalia na]
168758	ATU030 698	ATL8C5 63:258 1..1	nap					ATL8C5 63:257 1..231	0.72	g44328 07	51	3748	0.0	(AC006 570) putati ve polypr otein [Arabi dopsis thalia na]
168759	ATU030 699	ATL8C2 6171:2 492..8 30	nap					ATL8C2 6171:2 352..8 30	0.71	g27382 48	51	1524	1.7e- 118	(U9720 0) cobala min- indepe ndent methio nine syntha se [Arabi dopsis thalia na]
168760	ATU030 700	ATL8C2 6179:9 35..1	nap					ATL8C2 6179:7 26..41	0.70	g21297 27	51	450	4.0e- 43	RNA- bindin g protei n 37 - Arabid

168761	ATU030 701	ATL8S1 9320:1 ..445	nap					ATL8S1 9320:6 6..445	0.70		g31834 96	51	110	9.5e- 09	opsis thalia na [Arabi dopsis thalia na]
168762	ATU030 702	ATL8C1 1832:5 43..14 33	nap					ATL8C1 1832:5 43..12 94	0.70		g28424 93	51	114	2.6e- 09	(AL021 749) predic ted protei n [Arabi dopsis thalia na]
168763	ATU030 703	ATL8C4 0059:1 ..697	nap					ATL8C4 0059:1 28..69 7	0.69		g53308 4	51	720	1.2e- 68	(U0759 7) delta- 9 stearo yl- acyl carrie

168764	ATU030 704	ATL8C9 856:1. .3294	nap						0.69	g44552 94	51	829	4.5e- 88	r n desatu rase precur sor [Thunb ergia alata] (AL035 528) putati ve protei n [Arabi dopsis thalia na]
168765	ATU030 705	ATL8S5 978:1. .559	nap						0.69	g11694 19	51	274	1.1e- 26	SMF PROTEI N (DNA PROCES SING CHAIN A) [Haemo philus influe nzae Rd]
168766	ATU030 706	ATL8C6 340:56 9..1	nap						0.69	g10508 49	51	206	1.2e- 20	(X8374 2) MAP kinase phosph atase [Xenop us laevis

168767	ATU030 707	ATL8C2 0825:9 28..1	nap				ATL8C2 0825:7 03..40	0.68	g31281 92	51	402	4.3e- 24	[AC004 521) axi l- like protei n [Arabi dopsis thalia na]
168768	ATU030 708	ATL8C1 285:1. .1137	nap				ATL8C1 285:29 5..113 7	0.68	g42636 44	51	564	1.3e- 30	(AC006 136) putati ve Athila -like protei n [Arabi dopsis thalia na]
168769	ATU030 709	ATL8C7 609:27 24..15 26	nap				ATL8C7 609:26 82..15 26	0.67	g25650 08	51	877	1.3e- 47	(AC002 983) hypoth etical protei n [Arabi dopsis thalia na]
168770	ATU030 710	ATL8C1 5330:1 ..427	nap				ATL8C1 5330:4 16..27 9	0.67	g42622 15	51	301	6.3e- 29	(AC006 161) hypoth etical protei n [Arabi

168771	ATU030 711	ATL8S1 8172:1 61..6	nap				ATL8S1 8172:8 8..7	0.66	g13378 8	51	149	7.1e- 10	dopsis thalia nal CHLORO PLAST 30S RIBOSO MAL PROTEI N S14 [Nicot iana tabacu m]
168772	ATU030 712	ATL8C5 806:1. .463	nap				ATL8C5 806:59 ..376	0.66	g45860 69	51	172		(AC006 194) hypoth etical protei n [Arabi dopsis thalia nal]
168773	ATU030 713	ATL8C3 9356:1 ..1199	nap				ATL8C3 9356:2 17..36 3	0.64	g33778 16	51	976	8.1e- 118	(AF076 275) contai ns simila rity to Arabid opsis thalia na retrot ranspo son Athila (GB:X8

168774	ATU030 714	ATL8C1 5413:1 197..1	nap					ATL8C1 5413:7 27..53 8	0.64	g28268 76	51	62	0.0007 7	(Y1631 1) GidB- like protei n [Strep tomyce s coelic olor]	1801) [Arabi dopsis thalia na]
168775	ATU030 715	ATL8C4 2943:3 761..7 04	nap					ATL8C4 2943:3 304..7 04	0.64	g30470 72	51	2043	6.9e- 184	(AF058 825) No defini tion line found [Arabi dopsis thalia na]	
168776	ATU030 716	ATL8C2 0806:4 94..21 53	nap					ATL8C2 0806:4 94..21 33	0.63	g26550 08	51	268	8.8e- 20	(AF017 144) (1-4)- beta- mannan endohy drolas e [Lycop ersico n escule ntum]	

168777	ATU030 717	ATL8S3 54:1.. 284	nap				ATL8S3 54:180 ..284	0.63	942205 26	51	221	0.22	(AL035 356) Bnml like protei n [Arabi dopsis thalia na]
168778	ATU030 718	ATL8C4 1711:4 127..3 178	nap				ATL8C4 1711:3 797..3 178	0.62	943097 03	51	550	1.8e- 53	(AC006 266) putati ve transp oson protei n [Arabi dopsis thalia na]
168779	ATU030 719	ATL8C3 4848:7 58..14 60	nap				ATL8C3 4848:7 58..13 30	0.62	936953 97	51	930	1.1e- 91	(AF096 372) No defini tion line found [Arabi dopsis thalia na]
168780	ATU030 720	ATL8C6 75:208 1..140 9	nap				ATL8C6 75:208 1..140 9	0.61	944540 05	51	211	6.4e- 15	(AL035 396) putati ve protei n [Arabi

168781	ATU030 721	ATL8S3 350:1. .544	nap				ATL8S3 350:20 ..456	0.60	g38082 91	51	455	7.4e- 36	dopsis thalia na] (AF072 440) nitrog en regula tory protei n [Enter obacte r gergov iae]
168782	ATU030 722	ATL8C4 3586:1 04..79 0	nap				ATL8C4 3586:4 95..67 9	0.59	g36680 81	51	148		(AC004 667) putati ve peptid ase [Arabi dopsis thalia na]
168783	ATU030 723	ATL8C4 0654:1 481..1	nap				ATL8C4 0654:1 361..8 6	0.59	g40380 56	51	1886	6.0e- 191	(AC005 897) putati ve transp oson [Arabi dopsis thalia na]
168784	ATU030 724	ATL8C1 402:1. .2542	nap				ATL8C1 402:82 ..2541	0.59	g26550 08, g44544 80	51, 37	344, 155	1.8e- 26, 1.3e- 15	(AF017 144) (1-4)- beta-

168787	ATU030 727	ATL8C1 895:1. .3059	nap					ATL8C1 895:85 ..3059	0.57	g44552 99	51	444	2.7e- 46	(AL035 528) putati ve protei n [Arabi dopsis thalia na]
168788	ATU030 728	ATL8S2 4899:1 ..522	nap					ATL8S2 4899:4 78..36 7	0.57	g44163 03	51	620	4.5e- 29	(AF105 716) gag protei n [Zea mays]
168789	ATU030 729	ATL8C4 8256:1 ..667	nap					ATL8C4 8256:8 ..16	0.55	g43371 93	51	214	4.1e- 16	(AC006 403) hypoth etical protei n [Arabi dopsis thalia na]
168790	ATU030 730	ATL8S1 4422:5 07..1	nap					ATL8S1 4422:4 66..66	0.54	g13297 8, g31232 69	51, 31	186, 119	3.9e- 14, 0.94	50S RIBOSO MAL PROTEI N L4 [Bacil

168791	ATU030 731	ATL8C2 2859:3 148..1 04	nap							ATL8C2 2859:2 814..1 191	0.53	g44328 02	51	1799	3.1e- 133	lus stearo thermo philus]; 50S RIBOSO MAL PROTEI N L3 [Mycob acteri um leprae] (AC006 437) putati ve pol ypr otein, 5, partia l [Arabi dopsis thalia na]
168792	ATU030 732	ATL8C4 3367:8 14..14 86	nap							ATL8C4 3367:8 14..12 38	0.52	g42636 44	51	664		(AC006 136) putati ve Athila -like protei n [Arabi dopsis thalia na]
168793	ATU030	ATL8C1	nap							ATL8C1	0.52	g49030	51	558	9.0e-	(AB027

168794	733	8054:1 592..1						8054:1 515..5 0	18					52	507) ACE [Arabi dopsis thalia na]
	ATU030 734	ATL8C2 7527:6 87..6	nap					ATL8C2 7527:6 70..6	g27087 40	51	94				(AC003 952) hypoth etical protei n [Arabi dopsis thalia na]
168795	ATU030 735	ATL8C2 1938:1 620..6 73	nap					ATL8C2 1938:1 546..6 73	g22135 90	51	1476			3.2e- 154	(AC000 348) T7N9.1 0 [Arabi dopsis thalia na]
168796	ATU030 736	ATL8S1 9867:6 37..1	nap					ATL8S1 9867:5 67..22	g13253 0	51	616			2.6e- 60	PUTATI VE ATP- DEPEND ENT RNA HELICA SE RHLB [Esche richia coli]
168797	ATU030 737	ATL8C1 1449:4 220..1 282	nap					ATL8C1 1449:2 012..1 282	g44067 99	51	126			6.4e- 07	(AC006 304) hypoth etical

168798	ATU030 738	ATL8C4 150:54 3..1	nap				ATL8C4 150:35 6..43	0.50	g34136 99	51	215	3.2e- 21	(AC004 747) putative heat shock protein [Arabi dopsis thalia na]
168799	ATU030 739	ATL8C8 448:12 21..14 27	nap				ATL8C8 448:12 23..13 59	0.48	g22816 27	51	147	3.2e- 11	(AF003 094) AP2 domain contai ning protein RAP2.1 [Arabi dopsis thalia na]
168800	ATU030 740	ATL8S5 684:20 ..355	nap				ATL8S5 684:20 ..246	0.48	g29952 93	51	126	0.0002 0	(AL022 268) putative two- compon ent regula tor

168801	ATU030 741	ATL8C2 5153:3 45..14 24	nap					ATL8C2 5153:4 68..11 99	0.47	g14952 59	51	388	2.7e- 39	(X9782 6) orf04 [Arabi dopsis thalia na]	[Strep tonyce s coelic olor]
168802	ATU030 742	ATL8C2 7946:1 356..1	nap					ATL8C2 7946:1 326..7 9	0.44	g46801 80	51	1168		(AF111 709) polypr otein [Oryza sativa subsp. indica]	
168803	ATU030 743	ATL8C2 1814:1 ..1219	nap					ATL8C2 1814:9 3..118 9	0.42	g45803 91	51	153	1.4e- 10	(AC007 171) unknow n protei n [Arabi dopsis thalia na]	
168804	ATU030 744	ATL8C3 3609:9 23..1	nap							g43253 76	51	212	2.8e- 16	(AF128 396) No defini tion line found [Arabi dopsis	

																	TRNI INTRON (ORF 134) [Zea mays] (AC006 592) hypoth etical protei n [Arabi dopsis thalia na]
168813	ATU030 753	ATL8C3 0069:3 093..3 425	nap									g45444 46	51	132	2.0e- 05		
168814	ATU030 754	ATL8C2 6127:6 96..1	nap									g45824 55	51	164	2.0e- 12		(AC007 071) putati ve recept or protei n kinase [Arabi dopsis thalia na]
168815	ATU030 755	ATL8C1 3065:2 07..54 7	nap									g28221 99	51	271	9.8e- 22		(U9616 6) ATP- bindin g casset te protei n [Strep to

168816	ATU030 756	ATL8S3 0346:1 ..104	nap										g22810 92	51	152	3.4e- 10	(AC002 333) hypoth etical protei n [Arabi dopsis thalia na]	us crista j
168817	ATU030 757	ATL8C2 4415:9 27..1	nap										g21601 61	51	246	2.6e- 26	(AC000 132) F21M12 .7 gene produc t [Arabi dopsis thalia na]	
168818	ATU030 758	ATL8C1 4740:8 565..3 448	nap										g43357 20	51	1037	4.1e- 94	(AC006 248) putati ve revers e transc riptas e Tal- 1 [Arabi dopsis thalia na]	
168819	ATU030 759	ATL8C1 3190:5	nap										g31579 43	51	151	7.9e- 12	(AC002 131)	

																	putative retrotransposon [Arabidopsis thaliana]
168823	ATU030763	ATL8S1 4899:1..294	nap									g401523	51	84	2.0e-05		HYPOTHETICAL PROTEIN IN CYC3' REGION [Bradyrhizobium japonicum]
168824	ATU030764	ATL8S2 956:582..1	nap									g2621120	51	210	8.9e-14		(AE000799) O-linked GlcNAc transferase [Methanobacterium thermotrophicum]
168825	ATU030765	ATL8C2 2187:268..128	nap									g4105790	51	70	0.00016		(AF049926) PGP219 [Petunia x

168826	ATU030 766	ATL8S1 9820:3 22..31	nap															g22451 25	51	224	2.3e- 19	hybrid a] (Z9734 3) hypoth etical protei n [Arabi dopsis thalia na]
168827	ATU030 767	ATL8C2 2823:4 67..17 81	nap															g22535 82	51	168	1.6e- 09	(U7872 1) Serine protei nase (stubb le) isolog [Arabi dopsis thalia na]
168828	ATU030 768	ATL8S1 0674:5 82..14 6	nap															g38595 70	51	65	0.0076	(AF098 753) unknow n [Oryza sativa]
168829	ATU030 769	ATL8C2 9151:4 58..14 4	nap															g23234 68	51	97	9.5e- 13	(AF015 713) kinesi n- relate d protei n K4 [Dicty

168830	ATU030 770	ATL8S2 7255:2 19..56 7	nap									g21601 87	51	338	5.6e- 24	osteli um discoi deum] (AC000 132) Simila r to Nicoti ana tumor- relate d protei n (gb 26 453). [Arabi dopsis thalia na]
168831	ATU030 771	ATL8C1 3260:1 ..835	nap									g45811 43	51	377	3.9e- 40	(AC006 919) hypoth etical protei n [Arabi dopsis thalia na]
168832	ATU030 772	ATL8C4 4221:3 41..15 57	nap									g33353 63	51	809	7.6e- 82	(AC003 028) hypoth etical protei n [Arabi dopsis thalia

[illegible]

168845	ATU030 785	ATL8C8 834:1. .390	nap									g18413 57	51	343	1.0e- 31	[Arabi dopsis thalia na] (D8538 2) mitoch ondria l riboso mal protei n S11 (nucle ar encode d) [Oryza sativa]
168846	ATU030 786	ATL8C4 176:53 2..257	nap									g37859 83	51	193	2.8e- 16	(AC005 560) hypoth etical protei n [Arabi dopsis thalia na]
168847	ATU030 787	ATL8C1 512:61 8..1	nap									g32490 93	51	407	4.0e- 39	(AC004 473) Contai ns simila rity to heat shock transc

168850	ATU030 790	ATL8C3 3561:6 68..40 1	nap										g40565 04	51	281	1.7e- 22	(AC005 896) putati ve zinc finger protei n [Arabi dopsis thalia na]	PF0007 8 rvt, E=4.3e -08) [Arabi dopsis thalia na]; (AF076 274) No defini tion line found [Arabi dopsis thalia na]
168851	ATU030 791	ATL8C4 5319:1 ..1754	nap										g36872 34	51	1978	5.7e- 186	(AC005 169) putati ve copia- like transp osable elemen	

168852	ATU030 792	ATL8S1 0993:3 46..18 7	nap									g45672 26	51	105	5.2e- 07	t [Arabi dopsis thalia na] (AC007 119) unknow n protei n [Arabi dopsis thalia na]
168853	ATU030 793	ATL8C3 2852:7 97..35 9	nap									g42621 64	51	198	2.8e- 18	(AC005 275) putati ve ubiqui tin- like protei n [Arabi dopsis thalia na]
168854	ATU030 794	ATL8C2 5290:7 67..29 0	nap									g38602 46	51	498	1.5e- 50	(AC005 824) putati ve revers e- transc riptas e protei n [Arabi

168855	ATU030 795	ATL8C2 5715:1 275..1	nap									g42205 24	51	182	7.4e- 19	dopsis thalia nal (AL035 356) putati ve protei n [Arabi dopsis thalia nal]
168856	ATU030 796	ATL8S2 2350:2 25..520	nap									g10028 64	51	306	1.1e- 26	(U3434 6) unknow n [Parac occus denitr ifican s]
168857	ATU030 797	ATL8S2 25:603 ..112	nap							ATL8S2 25:555 ..112	1.00	g40622 72	50	326	8.1e- 30	(D9070 5) Hypoth tical protei n in gltJ 5'regi on . [Esche richia colij]
168858	ATU030 798	ATL8S1 3083:1 ..564	nap									g44173 05	51	741	4.2e- 60	(AC006 446) hypoth etical protei n

168859	ATU030 799	ATL8S4 621:33 3..599	nap										g40068 30	51	232	1.5e- 24	[AC005 970) hypoth etical protei n [Arabi dopsis thalia na]
168860	ATU030 800	ATL8C3 3097:3 91..85 9	nap						ATL8C3 3097:3 97..85 9	0.99			g23410 24	50	141	7.4e- 09	(AC000 104) F19P19 .1 [Arabi dopsis thalia na]
168861	ATU030 801	ATL8C2 2304:9 71..20 3	nap						ATL8C2 2304:8 98..20 3	0.99			g23927 65	50	343	4.4e- 30	(AC002 534) hypoth etical protei n [Arabi dopsis thalia na]
168862	ATU030 802	ATL8C1 3020:1 ..2145	nap						ATL8C1 3020:1 674..2 142	0.99			g21467 39	50	336	1.1e- 19	hexoki nase (EC 2.7.1. 1) 1 - Arabi dopsis thalia

168863	ATU030 803	ATL8C2 418:11 26..1	nap					ATL8C2 418:11 26..41 8	0.98	g35823 44	50	520	1.8e- 47	na [Arabi dopsis thalia na] (AC005 496) putati ve cell divisi on protei n [Arabi dopsis thalia na]
168864	ATU030 804	ATL8C3 2158:1 105..1	nap					ATL8C3 2158:1 105..4 24	0.98	g33954 43	50	1017	5.8e- 107	(AC004 683) putati ve ammoni um transp orter, 3', partia l [Arabi dopsis thalia na]
168865	ATU030 805	ATL8S2 0880:1 ..495	nap					ATL8S2 0880:2 1..495	0.96	g43781 77	50	62	1.3e- 05	(AF102 543) unknow n [Zymom onas mobili

168866	ATU030 806	ATL8C3 0449:7 83..60	nap				ATL8C3 0449:7 71..60	0.96	g43712 80	50	355	3.6e- 37	(AC006 260) hypoth etical protei n [Arabi dopsis thalia na]
168867	ATU030 807	ATL8C1 4576:1 65..11 06	nap				ATL8C1 4576:1 65..70 7, ATL8C1 4576:1 019..9 23	0.95, 0.81	g21045 29	50	962	3.5e- 101	(AF001 308) putati ve hexose transp orter [Arabi dopsis thalia na]
168868	ATU030 808	ATL8C2 8615:6 92..11 54	nap				ATL8C2 8615:1 134..9 42	0.94	g38602 46	50	436	5.0e- 39	(AC005 824) putati ve revers e- transc riptas e protei n [Arabi dopsis thalia na]
168869	ATU030 809	ATL8C4 193:1. .682	nap				ATL8C4 193:12 8..670	0.94	g23927 65	50	338	3.0e- 31	(AC002 534) hypoth

168870	ATU030 810	ATL8C2 046:13 6..808	nap					ATL8C2 046:13 6..808	0.94	g42635 48	50	695	3.2e- 61	etical protei n [Arabi dopsis thalia nal] (AC006 250) putati ve En/Spm transp oson protei n (mosai c protei n) [Arabi dopsis thalia nal]
168871	ATU030 811	ATL8C2 1450:2 541..1	nap					ATL8C2 1450:2 142..9 8	0.94	g42204 89	50	1682	7.6e- 149	(AC006 069) hypoht etical protei n [Arabi dopsis thalia nal]
168872	ATU030 812	ATL8S4 668:48 5..1	nap					ATL8S4 668:48 5..54	0.94	g17096 00	50	336	1.7e- 30	PCA OPERON TRANSC RIPTIO NAL ACTIVA

															TOR [Agrob acteri um tumefa ciens]
168873	ATU030 813	ATL8C4 3575:1 7..882	nap					ATL8C4 3575:2 3..837	0.94	g24975 43	50	862			PYRUA TE KINASE , CYTOSO LIC ISOZYM E [Nicot iana tabacu m]
168874	ATU030 814	ATL8C2 9574:7 06..1	nap					ATL8C2 9574:6 31..8	0.93	g11846 84	50	663	2.2e- 66		(U3285 3) MucD [Pseud omonas aerugi nosa]
168875	ATU030 815	ATL8C4 1778:1 ..973	nap					ATL8C4 1778:5 1..958	0.92	g43253 77	50	448	9.9e- 25		(AF128 396) simila r to maize transp oson MuDR- like protei ns [Arabi dopsis thalia na]

168876	ATU030 816	ATL8C4 3574:2 204..1 445	nap			ATL8C4 3574:2 185..1 445	0.92	g40334 31	50	755		PROBAB LE PYRUVATE KINASE , CYTOSOLIC ISOZYME (PK) [Arabidopsis thaliana]
168877	ATU030 817	ATL8C4 424:36 3..318 0	nap			ATL8C4 424:36 3..318 0	0.92	g30247 38	50	94	0.0002 0	TYPE II DNA TOPOISOMERASE E VI SUBUNIT A [Sulfolobus shibatae]
168878	ATU030 818	ATL8C3 1949:2 429..1	nap			ATL8C3 1949:3 76..44	0.91	g46801 83	50	588	3.7e- 56	(AF111 709) gag-pol protein [Oryza sativa subsp. indica]
168879	ATU030 819	ATL8S2 9534:1 ..531	nap			ATL8S2 9534:2 6..492	0.91	g23387 65	50	96	4.7e- 07	(AF018 073) periplasmic

168880	ATU030 820	ATL8C5 516:12 95..54 3	nap					ATL8C5 516:97 1..595	0.91	g44552 93	50	384	2.3e- 25	mannitol-binding protein; SmoM [Rhodospirillum rubrum]
168881	ATU030 821	ATL8S1 2:570. .1	nap					ATL8S1 2:176. .63	0.91	g45444 06	50	247	1.5e- 25	(AC006955) hypothetical protein [Arabidopsis thaliana]
168882	ATU030 822	ATL8C9 044:80 6..1	nap					ATL8C9 044:80 6..257	0.90	g43357 41	50	189		(AC006248) putative reverse transcriptase

168883	ATU030 823	ATL8C3 2622:1 250..1	nap					ATL8C3 2622:1 189..2 5	0.90	g22528 42	50	406	1.1e- 44	[Arabi dopsis thalia na] (AF013 293) No defini tion line found [Arabi dopsis thalia na]
168884	ATU030 824	ATL8C3 7506:7 048..3 522	nap					ATL8C3 7506:7 048..3 650	0.90	g39135 25	50	1601		DNA POLYME RASE DELTA CATALY TIC CHAIN [Glyci ne max]
168885	ATU030 825	ATL8C2 0854:4 491..3 072	nap					ATL8C2 0854:4 386..3 172	0.89	g33778 16	50	1549	2.5e- 160	(AF076 275) contai ns simila rity to Arabid opsis thalia na retrot ranspo son Athila

168886	ATU030 826	ATL8C4 3612:9 52..1	nap					ATL8C4 3612:9 25..20 0	0.89	g47536 58	50	876	(AL049 751) putati ve protei n [Arabi dopsis thalia na]
168887	ATU030 827	ATL8C1 5066:1 135..1	nap					ATL8C1 5066:1 135..5 18	0.88	g39534 74	50	229	(AC002 328) F2202. 19 [Arabi dopsis thalia na]
168888	ATU030 828	ATL8C3 696:28 89..21 42	nap					ATL8C3 696:27 88..21 42	0.88	g22447 79	50	803	(Z9733 5) hypoth etical protei n [Arabi dopsis thalia na]
168889	ATU030 829	ATL8C3 306:30 13..1	nap					ATL8C3 306:13 42..22	0.87	g47739 08, g42635 43	50, 44	1660, 947	(AF147 259) No defini tion line

168892	ATU030 832	ATL8C1 0175:1 ..4105	nap					ATL8C1 0175:2 69..31 63	0.84	g39246 09, g32692 82	50, 42	756, 1194		dopsis thalia nal (AF069 442) putati ve polypr otein of LTR transp oson [Arabi dopsis thalia nal; (AL030 978) putati ve protei n [Arabi dopsis thalia nal]
168893	ATU030 833	ATL8C2 3205:8 71..1	nap					ATL8C2 3205:6 94..37 9	0.83	g23427 23	50	344	1.8e- 26	(AC002 341) unknow n protei n [Arabi dopsis thalia nal]
168894	ATU030 834	ATL8C1 191:62 7..136 6	nap					ATL8C1 191:11 95..10 24	0.83	g30803 54	50	421	3.6e- 36	(AL022 580) hypoth etical

168895	ATU030 835	ATL8C1 9295:2 867..1 585	nap					ATL8C1 9295:2 867..1 594	0.83	948951 94	50	503	2.3e- 66	(AC007 661) putati ve peptid e transp orter protei n [Arabi dopsis thalia na]
168896	ATU030 836	ATL8C7 811:10 42..22 32	nap					ATL8C7 811:10 42..18 14	0.82	945388 96	50	943	4.4e- 100	(AL049 482) putati ve protei n [Arabi dopsis thalia na]
168897	ATU030 837	ATL8S8 889:1. .498	nap					ATL8S8 889:56 ..466	0.82	926128 04	50	89	0.0001 4	(AL008 883) hypoth etical protei n Rv2859 C [Mycob acteri

168898	ATU030 838	ATL8C3 5398:5 0..846	nap						ATL8C3 5398:5 0..562	0.82	g26513 05	50	877	3.0e- 91	(AC002 336) hypoth etical protei n [Arabi dopsis thalia na]	um tuberc ulosis]
168899	ATU030 839	ATL8C2 2028:1 864..8 4	nap						ATL8C2 2028:1 783..8 4	0.81	g41857 40	50	1284	9.3e- 119	(AF079 999) putati ve glutam ate recept or [Arabi dopsis thalia na]	
168900	ATU030 840	ATL8C5 085:16 75..87	nap						ATL8C5 085:15 85..21 7	0.81	g18830 06	50	242	7.8e- 15	(Y1148 3) jasmon ate induci ble protei n [Brass ica napus]	
168901	ATU030 841	ATL8S3 0021:1 ..656	nap						ATL8S3 0021:5 0..647	0.81	g25071 47	50	336	2.9e- 31	TRIGGE R FACTOR	

168902	ATU030 842	ATL8S2 0674:5 32..1	nap							0.81	g47727 4	50	223	3.7e- 23	3- methyl adenin e DNA glycos ylase - Bacill us subtil is []	(TF) [Esche richia coli]
168903	ATU030 843	ATL8C3 422:12 1..837	nap							0.80	g43372 08	50	357	1.7e- 24	(AC006 403) hypoth etical protei n [Arabi dopsis thalia na]	
168904	ATU030 844	ATL8C3 6140:1 7..221 7	nap							0.80	g37023 33	50	138	3.9e- 14	(AC005 397) hypoth etical protei n [Arabi dopsis thalia na]	
168905	ATU030 845	ATL8C3 0934:3 177..6 11	nap							0.80	g48502 99	50	109	1.9e- 08	(AL049 876) putati ve protei	

168914	ATU030 854	..1304	nap					01..13 04	0.78	g48951 65	50	670	8.0e- 69	Terpen e cyclas e, TC1 [Arabi dopsis thalia na]
	ATL8C9 965:75 1..321 2							ATL8C9 965:75 1..321 2						(AC007 231) unknow n protei n [Arabi dopsis thalia na]
168915	ATU030 855	ATL8C3 7194:1 360..1	nap					ATL8C3 7194:1 310..1 07	0.77	g41857 38	50	723		(AF079 998) putati ve glutam ate recept or [Arabi dopsis thalia na]
168916	ATU030 856	ATL8C2 0729:1 86..16 60	nap					ATL8C2 0729:2 93..16 60	0.77	g44172 67	50	335	3.6e- 29	(AC007 019) hypoth etical protei n [Arabi dopsis thalia na]

168917	ATU030 857	ATL8C3 3511:7 83..1	nap			ATL8C3 3511:6 22..16 5	0.77	g42635 48	50	720	7.5e- 58	(AC006 250) putati ve En/Spm transp oson protei n (mosai c protei n) [Arabi dopsis thalia na]
168918	ATU030 858	ATL8C2 9233:6 23..31 29	nap			ATL8C2 9233:6 23..22 65	0.76	g28946 06	50	826	8.5e- 74	(AL021 889) putati ve protei n [Arabi dopsis thalia na]
168919	ATU030 859	ATL8C4 3918:6 17..1	nap			ATL8C4 3918:5 19..7	0.76	g16286 22	50	461		(U7263 1) flavon ol syntha se [Arabi dopsis thalia na]
168920	ATU030 860	ATL8C4 9501:3 658..2	nap			ATL8C4 9501:3 658..2	0.75	g22248 99	50	134	1.5e- 05	(U6713 3) DNA-

168921	ATU030 861	ATL8C1 5097:6 79..13 43	nap							254	ATL8C1 5097:7 24..11 80	0.75	g10766 11	50	428	1.2e- 39	bindin g protei n PCMYB1 [Petro selinu m crispu m]
168922	ATU030 862	ATL8C3 9659:1 ..1694	nap								ATL8C3 9659:4 5..169 4	0.75	g42630 63	50	884	2.5e- 42	(AC005 142) hypoth etical protei n [Arabi dopsis thalia na]
168923	ATU030 863	ATL8S2 2687:1 ..558	nap								ATL8S2 2687:5 4..358	0.75	g33353 70	50	250	7.5e- 18	(AC003 028) hypoth etical protei n [Arabi dopsis

168924	ATU030 864	ATL8C2 420:74 5..1	nap				ATL8C2 420:74 3..90	0.74	g47551 99	50	428	3.7e- 40	thalia na] (AC007 018) hypoth etical protei n [Arabi dopsis thalia na]
168925	ATU030 865	ATL8S2 0897:1 44..59 2	nap				ATL8S2 0897:1 97..57 3	0.74	g28424 93	50	443	4.4e- 47	(AL021 749) predic ted protei n [Arabi dopsis thalia na]
168926	ATU030 866	ATL8C1 1634:3 403..2 69	nap				ATL8C1 1634:3 403..1 044	0.74	g38602 46	50	203	1.1e- 09	(AC005 824) putati ve revers e- transc riptas e protei n [Arabi dopsis thalia na]
168927	ATU030 867	ATL8C2 1880:2 698..1	nap				ATL8C2 1880:2 698..1	0.72	g37575 16	50	2131	2.7e- 208	(AC005 167) putati

168928	ATU030 868	ATL8S3 329:56 1..1	nap					53	0.72	g30251 87	50	311	3.4e- 31	ve TMV resistance protein [Arabis dopsis thaliana na]
168929	ATU030 869	ATL8S1 6620:1 ..461	nap					ATL8S1 6620:7 3..424	0.72	g26513 01	50	774	2.6e- 72	(AC002 336) putative serine /threonine protein kinase [Arabis dopsis thaliana na]
168930	ATU030 870	ATL8C3 4654:1 676..1	nap					ATL8C3 4654:1 676..2 6	0.72	g43371 96	50	460	3.5e- 48	(AC006 403) putative serine

168934	ATU030 874	ATL8C3 3522:3 21..12 23	nap					ATL8C3 3522:3 52..11 68	0.70	g27314 43	50	237	1.7e- 22	dopsis thalia nal (U9692 3) [Asper gillus niger]
168935	ATU030 875	ATL8C9 069:22 45..33 6	nap					ATL8C9 069:14 15..33 6	0.70	g23927 63	50	400		(AC002 534) hypoth etical protei n [Arabi dopsis thalia nal]
168936	ATU030 876	ATL8C4 4321:1 ..1357	nap					ATL8C4 4321:9 5..131 7	0.68	g42630 63	50	825	3.1e- 78	(AC005 142) hypoth etical protei n [Arabi dopsis thalia nal]
168937	ATU030 877	ATL8C2 8625:1 ..775	nap					ATL8C2 8625:1 74..77 5	0.68	g25015 55	50	461	1.2e- 36	POSSIB LE APOSPO RY- ASSOCI ATED PROTEI N C [Penni setum ciliar e]

168938	ATU030 878	ATL8C5 051:1. .729	nap				ATL8C5 051:13 3..562	0.68	g38343 20	50	274	2.5e- 31	(AC005 679) Simila r to [Arabi dopsis thalia na]
168939	ATU030 879	ATL8C3 7996:2 04..10 98	nap				ATL8C3 7996:2 04..10 34	0.67	g45860 36	50	323	4.6e- 33	(AC007 109) hypoth etical protei n [Arabi dopsis thalia na]
168940	ATU030 880	ATL8S2 5027:1 ..217	nap				ATL8S2 5027:7 4..212	0.67	g16525 81	50	123	1.7e- 10	(D9090 6) urease access ory protei n E [Synec hocyst is sp.]
168941	ATU030 881	ATL8C1 9985:1 ..741	nap				ATL8C1 9985:1 06..23 1	0.66	g33554 70	50	471	9.4e- 40	(AC004 218) putati ve lysoph osphol ipase [Arabi dopsis thalia na]

168942	ATU030 882	ATL8C1 1624:9 32..1	nap				ATL8C1 1624:9 32..11 7	0.66	g33353 64	50	461	2.7e- 44	(AC003 028) hypoth etical protei n [Arabi dopsis thalia na]
168943	ATU030 883	ATL8C4 5552:1 ..2709	nap				ATL8C4 5552:5 9..270 9	0.66	g43253 66	50	2153	9.1e- 213	(AF128 396) simila r to maize transp oson MuDR- like protei ns [Arabi dopsis thalia na]
168944	ATU030 884	ATL8C2 6569:1 392..1	nap				ATL8C2 6569:1 392..1 24	0.65	g46462 26	50	597	9.6e- 53	(AC007 235) hypoth etical protei n [Arabi dopsis thalia na]
168945	ATU030 885	ATL8C1 1069:9 57..1	nap				ATL8C1 1069:4 75..11 5	0.64	g48357 67	50	171	9.1e- 16	(AC007 202) T8K14. 16 [Arabi

168946	ATU030 886	ATL8S2 431:30 ..640	nap					ATL8S2 431:30 ..624	0.63	g13628 2	50	730	2.0e- 64	dopsis thalia na]
168947	ATU030 887	ATL8C3 1198:2 345..5 31	nap					ATL8C3 1198:2 040..1 329	0.62	g44172 84	50	244	4.6e- 23	(AC007 019) hypoth etical protei n [Arabi dopsis thalia na]
168948	ATU030 888	ATL8C3 189:90 05..10 163	nap					ATL8C3 189:90 05..99 60	0.61	g42630 63	50	1282	8.7e- 98	(AC005 142) hypoth etical protei n [Arabi dopsis thalia na]
168949	ATU030 889	ATL8C3 4990:1 333..1	nap					ATL8C3 4990:1 276..1 48	0.61	g45672 79	50	967	1.5e- 100	(AC006 841) putati ve serine /threo

168950	ATU030 890	ATL8C2 9815:8 28..32	nap					ATL8C2 9815:7 16..93	0.61	g32978 11	50	773	1.7e- 76	(AL031 032) putati ve peroxi dase [Arabi dopsis thalia na]
168951	ATU030 891	ATL8C2 5076:1 124..3 6	nap					ATL8C2 5076:1 114..3 6	0.60	g10027 98	50	465	3.0e- 48	(U3391 6) Cpm5 [Crate rostig ma planta gineum]
168952	ATU030 892	ATL8C3 4398:2 62..96 4	nap					ATL8C3 4398:2 62..36 9	0.59	g44172 86	50	501	8.7e- 40	(AC007 019) putati ve shikim ate kinase [Arabi dopsis thalia na]
168953	ATU030 893	ATL8C1 4487:1	nap					ATL8C1 4487:1	0.59	g23427 38	50	489	6.3e- 41	(AC002 341)

168954	ATU030 894	305..1							305..5 8	0.59		g22449 60	50	389	1.1e- 36	hypothetical protein [Arabidopsis thaliana]
	ATL8S3 0685:4 87..1	nap							ATL8S3 0685:4 79..15	0.59						(Z97340) similarity to copia-like retrotransposon [Arabidopsis thaliana]
168955	ATU030 895	ATL8C2 203:1. .2822	nap						ATL8C2 203:11 ..2627	0.58		g45443 72	50	2016	1.4e- 199	(AC006920) putative reverse transcriptase [Arabidopsis thaliana]
168956	ATU030 896	ATL8C3 4330:7 70..1	nap						ATL8C3 4330:5 25..25	0.58		g28322 44	50	814	1.9e- 59	(AF031569) hypothetical protein

168957	ATU030 897	ATL8C2 9926:2 99..24 53	nap						ATL8C2 9926:1 875..2 263	0.56	g45444 33, g48951 68	50, 40	86, 632	0.16, 1.6e- 63	n [Zea mays] (AC006 955) hypothesis et al protein [Arabi dopsis thalia na]; (AC007 662) putative repl lication protein Al [Arabi dopsis thalia na]
168958	ATU030 898	ATL8C1 21:1.. 535	nap						ATL8C1 21:72.. .399	0.56	g33193 74	50	542	8.4e- 34	(AF077 409) simila r to chloro plast triose phosph ate transl ocators [Arabi dopsis thalia

168959	ATU030 899	ATL8C8 456:17 98..1	nap				ATL8C8 456:17 98..21 5	0.56	g18144 03	50	1397	1.1e- 138	na] (U8488 9) methio nine syntha se [Mesem bryant hemum crysta llinum]
168960	ATU030 900	ATL8S1 9044:5 95..1	nap				ATL8S1 9044:4 68..9	0.56	g22664 23	50	136	4.9e- 12	(Y1391 7) yngJ [Bacil lus subtil is]
168961	ATU030 901	ATL8C3 1285:1 ..2005	nap				ATL8C3 1285:6 4..200 5	0.55	g49143 61	50	2090	2.1e- 205	(AC007 289) putati ve revers e transc riptas e [Arabi dopsis thalia na]
168962	ATU030 902	ATL8C3 8583:6 05..1	nap				ATL8C3 8583:2 24..16 5	0.55	g40998 31	50	371	4.0e- 40	(U9026 4) bifunc tional nuclea se bfnl

168963	ATU030 903	ATL8C2 2630:1 462..3 12	nap						ATL8C2 2630:1 268..3 12	0.54	g41153 58	50	683	5.1e- 60	[Arabi dopsis thalia na]
168964	ATU030 904	ATL8C1 0369:4 363..6 925	nap						ATL8C1 0369:4 363..6 912	0.54	g45443 72	50	1294		(AC006 920) putati ve revers e transc riptas e [Arabi dopsis thalia na]
168965	ATU030 905	ATL8C2 3375:1 ..514	nap						ATL8C2 3375:2 00..35 4	0.54	g22621 75	50	299	7.6e- 18	(AC002 329) hypoth etical protei n [Arabi dopsis thalia na]

168966	ATU030 906	ATL8C8 941:1. .2701	nap					ATL8C8 941:15 ..2701	0.53		g45443 72	50	2321	1.1e- 216	na] (AC006 920) putati ve revers e transc riptas e [Arabi dopsis thalia na]
168967	ATU030 907	ATL8S9 111:1. .569	nap					ATL8S9 111:7. .425	0.53		g15528 23	50	441	3.7e- 42	(U7021 4) IS30 transp osase [Esche richia coli]
168968	ATU030 908	ATL8S9 657:46 5..1	nap					ATL8S9 657:41 3..36	0.52		g36439 96	50	440	2.7e- 37	(AF087 482) putati ve regula tory protei n [Pseud omonas aerugi nosa]
168969	ATU030 909	ATL8C3 8410:1 522..8 24	nap					ATL8C3 8410:1 367..8 77	0.51		g44553 36	50	673	1.0e- 70	(AL035 525) pectin estera se- like

168970	ATU030 910	ATL8C4 4881:1 284..1	nap					ATL8C4 4881:1 033..6 4	0.51	g42635 22	50	885	8.7e- 87	(AC004 044) hypoth etical protei n [Arabi dopsis thalia na]
168971	ATU030 911	ATL8C4 9519:1 ..900	nap					ATL8C4 9519:1 97..85 5	0.51	g26186 99	50	831	1.0e- 74	(AC002 510) unknow n protei n [Arabi dopsis thalia na]
168972	ATU030 912	ATL8C3 313:80 2..140 4	nap					ATL8C3 313:12 20..92 0	0.51	g43253 49	50	281	1.1e- 22	(AF128 394) contai ns simila rity to Petuni a PTTA' (GB:AF 009516) [Arabi

168973	ATU030 913	ATL8C5 48:931 ..164	nap					ATL8C5 48:886 ..466	0.51	g30591 31	50	636	1.6e- 59	dopsis thalia nal (AJ000 478) cytoch rome P450 [Helia nthus tubero sus]
168974	ATU030 914	ATL8C6 492:25 07..37 78	nap					ATL8C6 492:25 07..35 57	0.50	g44328 14	50	165	1.4e- 07	(AC006 593) unknow n protei n [Arabi dopsis thalia nal]
168975	ATU030 915	ATL8C1 4252:6 60..1	nap					ATL8C1 4252:6 60..93	0.50	g15459 01	50	205	2.0e- 19	(Y0789 9) pectin estera se [Caric a papaya]
168976	ATU030 916	ATL8C1 9533:1 ..1688	nap					ATL8C1 9533:2 21..16 88	0.48	g45845 24	50	554	2.7e- 56	(AL049 607) putati ve protei n [Arabi dopsis thalia]

168977	ATU030 917	ATL8S1 0662:3 21..1	nap				ATL8S1 0662:3 21..46	0.47	g26358 12	50	164	1.3e- 14	na] (Z9912 0) simila r to hypoth etical protei ns [Bacil lus subtil is]
168978	ATU030 918	ATL8S1 1332:4 46..1	nap				ATL8S1 1332:4 46..25 9	0.47	g11976 49	50	219	1.2e- 19	(U4685 9) WbcG [Yersi nia entero coliti ca (type 0:8)]
168979	ATU030 919	ATL8S4 796:46 ..539	nap				ATL8S4 796:46 ..461	0.45	g32568 59	50	132	7.5e- 09	(AP000 002) 314aa long hypoth etical protei n [Pyroc occus horiko shii]
168980	ATU030 920	ATL8C1 5029:1 ..1016	nap				ATL8C1 5029:1 31..56 9	0.45	g23179 09	50	845	2.9e- 60	(U8995 9) CER1- like protei

168981	ATU030 921	ATL8C4 7509:4 998..2 804	nap					ATL8C4 7509:4 731..3 485	0.44	g33353 63	50	837	1.2e- 83	n [Arabi dopsis thalia na] (AC003 028) hypoth etical protei n [Arabi dopsis thalia na]
168982	ATU030 922	ATL8C3 7406:1 ..752	nap					ATL8C3 7406:1 12..71 6	0.44	g23427 36	50	541		(AC002 341) unknow n protei n [Arabi dopsis thalia na]
168983	ATU030 923	ATL8C4 9547:6 29..1	nap					ATL8C4 9547:6 29..29 7	0.43	g34452 04	50	443	7.7e- 34	(AC004 786) putati ve GTP- bindin g protei n [Arabi dopsis thalia na]
168984	ATU030 924	ATL8C3 7380:1	nap					ATL8C3 7380:1	0.43	g22621 03	50	1110		(AC002 343)

168985	ATU030 925	993..1	nap				623..8 22	0.43	g35137 45	50	4063	0.0	unknown protein [Arabidopsis thaliana]
		ATL8C1 7023:1 ..2508					ATL8C1 7023:1 32..19 63						(AF080 118) contains similarity to reverse transcriptase (Pfam: rvt.hm m, score: 42.57) [Arabidopsis thaliana]
168986	ATU030 926	ATL8C3 1881:1 ..721	nap				ATL8C3 1881:8 2..694	0.42	g41853 11	50	1108	1.7e- 104	(AF090 446) polyprotein [Zea mays]
168987	ATU030 927	ATL8C4 2334:1 591..2 22	nap				ATL8C4 2334:1 591..5 45	0.40	g49144 01	50	173	3.0e- 21	(AL050 352) hypothetical protein

168988	ATU030 928	ATL8C3 571:1. .862	nap											g49268 20	50	153	2.9e- 25	[Arabi dopsis thalia na] (AC004 135) T17H7. 5 [Arabi dopsis thalia na]
168989	ATU030 929	ATL8C1 8202:9 42..1	nap											g43253 48	50	308	1.5e- 24	(AF128 394) contai ns simila rity to phosph ate transp orters [Arabi dopsis thalia na]
168990	ATU030 930	ATL8C1 3904:2 495..1	nap											g38057 58	50	104	7.8e- 05	(AC005 693) putati ve gag- protea se polypr oteins [Arabi dopsis thalia na]

168991	ATU030 931	ATL8C4 2042:1 273..1	nap							g47739 20	50	532	8.0e- 57	(AF147 259) F10A2. 17 gene produc t [Arabi dopsis thalia na]
168992	ATU030 932	ATL8S1 9476:6 22..1	nap							g26186 92	50	560	1.4e- 50	(AC002 510) putati ve zinc- finger protei n [Arabi dopsis thalia na]
168993	ATU030 933	ATL8C2 0792:1 ..182	nap							g41917 81	50	284	4.5e- 08	(AC005 917) hypoth etical protei n [Arabi dopsis thalia na]
168994	ATU030 934	ATL8C2 7268:1 ..762	nap							g43712 80	50	275		(AC006 260) hypoth etical protei n [Arabi

169002	ATU030 942	ATL8C3 8662:1 340..1 711	nap										g11456 97	50	392	7.2e- 40	dopsis thalia nal (U3948 5) delta tonopl ast integr al protei n [Arabi dopsis thalia nal]
169003	ATU030 943	ATL8C9 335:1. .1024	nap										g46787 06	50	1150	1.7e- 115	(AL021 636) cytoch rome P450- like protei n [Arabi dopsis thalia nal]
169004	ATU030 944	ATL8C1 2040:2 91..10 76	nap										g27603 18	50	391	9.9e- 36	(AC002 130) F1N21. 2 [Arabi dopsis thalia nal]
169005	ATU030 945	ATL8C4 081:28 33..25 42	nap										g30470 70	50	286	1.0e- 25	(AF058 825) No defini

169006	ATU030 946	ATL8C1 1333:3 98..11 75	nap										g45103 98	50	323	1.3e- 28	(AC006 587) hypoth etical protei n [Arabi dopsis thalia na]
169007	ATU030 947	ATL8C1 2301:1 068..1 93	nap										g45858 72	50	537	5.1e- 52	(AC005 850) Hypoth etical protei n [Arabi dopsis thalia na]
169008	ATU030 948	ATL8C6 192:77 9..1	nap										g37790 29	50	304	2.5e- 31	(AC005 171) putati ve zinc finger protei n [Arabi dopsis thalia na]
169009	ATU030	ATL8C1	nap										g48369	50	810		(AC007)

169010	949	0525:1 ..2806	nap							17	50	284	1.2e- 23	(AC005 106) T25N20 .18 [Arabi dopsis thalia na]	153) 80099 [Arabi dopsis thalia na]
	ATU030 950	ATL8C4 5968:4 02..94 0	nap							g39351 54	50	284	1.2e- 23	(AC005 106) T25N20 .18 [Arabi dopsis thalia na]	153) 80099 [Arabi dopsis thalia na]
169011	ATU030 951	ATL8C4 2817:5 99..1	nap							g46462 24	50	535	9.0e- 59	(AC007 295) hypoth etical protei n [Arabi dopsis thalia na]	(AC007 295) hypoth etical protei n [Arabi dopsis thalia na]
169012	ATU030 952	ATL8C3 0903:4 3..655	nap							g29110 81	50	209	1.3e- 21	(AL021 960) putati ve protei n [Arabi dopsis thalia na]	(AL021 960) putati ve protei n [Arabi dopsis thalia na]
169013	ATU030 953	ATL8C2 6130:1 833..1 48	nap							g44671 25	50	1957	1.3e- 196	(AL035 538) putati ve protei n	(AL035 538) putati ve protei n

169014	ATU030 954	ATL8C4 4276:5 70..82	nap									g10766 11	50	422	1.6e- 42	[Arabi dopsis thalia na]
169015	ATU030 955	ATL8C8 858:22 71..16 21	nap									g48369 33	50	789	2.3e- 75	(AC006 085) Highly simila r to UDPG glucos yltran sferas e [Arabi dopsis thalia na]
169016	ATU030 956	ATL8C4 2800:9 51..12 5	nap									g47339 85	50	157	1.1e- 10	(AC007 209) hypothe tical protei n, 5' partia l [Arabi dopsis na]

169025	ATU030 965	ATL8S8 870:45 6..1	nap						ATL8S8 870:44 4..13	1.00	g11709 40	49	412	1.1e- 30	UDP Glucos amine N- Acyltr ansfer ase [Chlam ydia pneumo niae]
169026	ATU030 966	ATL8C4 3995:1 013..1	nap								g46783 48	50	626		(AL049 659) putati ve protei n [Arabi dopsis thalia na]
169027	ATU030 967	ATL8S6 639:44 4..107	nap								g46782 06	50	107		(AC007 134) putati ve polyga lactur onase

169028	ATU030 968	ATL8C3 3389:1 196..2 92	nap										g10022 6	50	392	3.0e- 43	[Arabi dopsis thalia na] hypo- thetical protein - tomato [Lycop ersico n escule ntum]
169029	ATU030 969	ATL8S1 4109:2 04..51 9	nap										g40380 66	50	148	2.1e- 10	(AC005 897) hypo- thetical protein [Arabi dopsis thalia na]
169030	ATU030 970	ATL8C4 137:33 27..12 63	nap										g33193 60	50	2196	6.4e- 199	(AF077 408) contai ns simila rity to Vicia faba retrot ranspo son- like gene (GB:AB 007467

169033	ATU030 973	ATL8C4 0706:5 89..1	nap										g43253 49	50	261	7.8e- 25	dopsis thalia na] (AF128 394) contai ns simila rity to Petuni a PTTA' (GB:AF 009516) [Arabi dopsis thalia na]
169034	ATU030 974	ATL8S2 4035:1 95..1	nap										g33957 56	50	192	3.2e- 12	(U7629 7) planta cyanin [Arabi dopsis thalia na]
169035	ATU030 975	ATL8C2 3839:1 232..1	nap										g37905 75	50	131	1.9e- 06	(AF078 825) RING- H2 finger protei n RHA3b [Arabi dopsis thalia na]

169036	ATU030 976	ATL8S3 053:49 ..392	nap							g28221 99	50	303	1.4e- 27	(U9616 6) ATP- bindin g casset te protei n [Strep tococc us crista l]
169037	ATU030 977	ATL8S1 8877:5 92..1	nap							g13526 08	50	306	1.6e- 26	N- UTILIZ ATION SUBSTA NCE PROTEI N A HOMOLO G [Therm us thermo philus]
169038	ATU030 978	ATL8C1 5043:1 ..1194	nap							g29795 53	50	282	9.8e- 29	(AC003 680) hypoth etical protei n [Arabi dopsis thalia na]
169039	ATU030 979	ATL8C6 076:93	nap							g31842 87	50	97	2.4e- 05	(AC004 136)

169052	ATU030 992	ATL8C1 5442:9 94..1	nap				ATL8C1 5442:9 46..19 3	0.99	g30636 98	49	137	1.1e- 08	osacch aromyc es pombe]
169053	ATU030 993	ATL8C5 017:1. .1589	nap				ATL8C5 017:92 ..858	0.99	g45875 77	49	263	4.1e- 25	(AL022 537) putati ve protei n [Arabi dopsis thalia na]
169054	ATU030 994	ATL8S9 546:51 8..1	nap				ATL8S9 546:46 8..10	0.99	g44553 09	49	365	1.1e- 25	(AL035 528) hypoth etical protei n [Arabi dopsis thalia na]
169055	ATU030 995	ATL8S2 8089:4 70..1	nap				ATL8S2 8089:4 70..42	0.99	g17621 17	49	177	1.5e- 17	(U4128 0) 3- hydrox y-3- methyl glutar yl-CoA lyase

169056	ATU030 996	ATL8C2 5293:1 ..1132	nap					ATL8C2 5293:1 33..11 32	0.99	g30212 84	49	958	3.8e- 105	(AL022 347) serine /threo nine kinase - like protei n [Arabi dopsis thalia na]	[Rhodo spiril lum rubrum]
169057	ATU030 997	ATL8C4 6664:1 ..896	nap					ATL8C4 6664:1 90..79 3	0.98	g11763 25	49	693	3.1e- 68	GTP- BINDIN G PROTEI N TYP A/B IPA HOMOLO G [Haemo philus influe nzae Rd]	
169058	ATU030 998	ATL8C4 648:86 1..291	nap					ATL8C4 648:85 8..291	0.98	g38941 93	49	431	2.3e- 45	(AC005 662) putati ve strict osidin e syntha	

169059	ATU030 999	ATL8C4 5387:1 ..1515	nap					ATL8C4 5387:9 2..143 2	0.97	g36412 52	49	526	2.5e- 57	se [Arabi dopsis thalia na] (AF053 127) leucin e-rich recept or- like protei n kinase [Malus domest ica]
169060	ATU031 000	ATL8C2 7574:1 504..1 026	nap					ATL8C2 7574:1 435..1 026	0.97	g45672 93	49	97		(AC006 918) putati ve Athila retro element ORF1 protei n [Arabi dopsis thalia na]
169061	ATU031 001	ATL8C4 1430:2 074..1	nap					ATL8C4 1430:2 015..8 54	0.97	g28092 46	49	673	4.1e- 57	(AC002 560) F2401. 15 [Arabi dopsis thalia na]

169062	ATU031 002	ATL8S4 953:61 3..1	nap				ATL8S4 953:48 0..62	0.96	g29833 65	49	275	4.4e- 23	(AE000 708) carbox yl- termin al protea se [Aquif ex aeolic us]
169063	ATU031 003	ATL8C4 4150:1 ..630	nap				ATL8C4 4150:6 9..561	0.96	g12902 1	49	336	5.5e- 36	SPO0B- ASSOCI ATED GTP- BINDIN G PROTEI N [Bacil lus subtil is]
169064	ATU031 004	ATL8C1 7127:4 768..4 186	nap				ATL8C1 7127:4 695..4 187	0.95	g33341 44	49	209	2.8e- 19	G1/S- SPECIF IC CYCLIN C-TYPE [Oryza sativa]
169065	ATU031 005	ATL8S1 401:60 ..604	nap				ATL8S1 401:60 ..595	0.95	g24927 45	49	436	1.6e- 32	3- OXOACY L- [Actin obacil lus actino mycete

169066	ATU031 006	ATL8S2 9848:1 ..446	nap				ATL8S2 9848:3 75..32 4	0.94	g15196 44	49	351	5.8e- 32	monit ans] (U6771 8) SigA [Chlor obium tepidu m]
169067	ATU031 007	ATL8C2 8621:1 ..1139	nap				ATL8C2 8621:1 87..99 6	0.94	g45126 59	49	280	8.5e- 25	(AC006 931) putati ve protei n kinase [Arabi dopsis thalia na]
169068	ATU031 008	ATL8C3 2070:1 427..1	nap				ATL8C3 2070:1 141..1	0.94	g44328 58	49	1357	9.6e- 109	(AC006 300) putati ve diseas e resist ance protei n [Arabi dopsis thalia na]
169069	ATU031 009	ATL8C4 6507:1 0..917	nap				ATL8C4 6507:1 0..917	0.93	g36953 96	49	939	1.1e- 89	(AF096 372) contai ns simila rity

169070	ATU031 010	ATL8C2 532:17 2..183 1	nap							ATL8C2 532:17 2..163 8	0.92	g31525 90	49	929	6.3e- 72	to Arabid opsis thalia na retrot ranspo son Athila (GB:X8 1801) [Arabi dopsis thalia na]
169071	ATU031 011	ATL8C3 6135:1 ..1865	nap							ATL8C3 6135:5 63..17	0.92	g41159 23	49	1111	9.2e- 112	(AC002 986) Simila r to protei n serine /threo nine kinase NPK15 gb D31 737 from Nicoti ana tabacu m. [Arabi dopsis thalia na]
																(AF118 222) contai

169073	ATU031 013	ATL8C5 222:31 70...43 64	nap					ATL8C5 222:33 69...42 59	0.91	g34260 46	49	667	4.1e- 70	isolog [Arabi dopsis thalia na] (AC005 168) simila r to salt- induci ble protei n [Arabi dopsis thalia na]
169074	ATU031 014	ATL8S2 2760:5 56..1	nap					ATL8S2 2760:4 81..59	0.90	g40017 45	49	219	1.8e- 16	(AB020 760) Phenyl acetal dehyde reduct ase [Coryn ebacte rium sp. ST-10]
169075	ATU031 015	ATL8C7 528:88 7..1	nap					ATL8C7 528:79 2..30	0.89	g21601 73	49	378	5.8e- 38	(AC000 132) Simila r to N. tabacu m salt- induci ble

169076	ATU031 016	ATL8C2 7651:2 652..3 08	nap					ATL8C2 7651:2 584..1 399	0.89		g22810 90	49	523		protein (gb U0 8285). [Arabi dopsis thalia na]
169077	ATU031 017	ATL8S7 739:1. .518	nap					ATL8S7 739:62 ..504	0.89		g28978 22	49	144	1.6e- 12	(AB011 029) simila r to integr ase/re combin ase XerD [Selen omonas rumina ntium]
169078	ATU031 018	ATL8C2 8520:3 022..2 635	nap					ATL8C2 8520:3 012..2 635	0.88		g46783 80	49	456	1.4e- 39	(AL049 656) putati ve protein [Arabi dopsis thalia

169079	ATU031 019	ATL8C4 4050:1 ..1036	nap				ATL8C4 4050:3 25..95 9	0.87	g32928 26	49	763	6.4e- 56	(AL031 018) hypoth etical protei n [Arabi dopsis thalia na]
169080	ATU031 020	ATL8C1 4090:1 ..804	nap				ATL8C1 4090:7 ..701	0.87	g42204 60	49	1002	4.6e- 94	(AC006 216) Simila r to [Arabi dopsis thalia na]
169081	ATU031 021	ATL8C2 0887:2 51..30 59	nap				ATL8C2 0887:6 63..28 74	0.87	g26233 07	49	1814	6.3e- 152	(AC002 409) putati ve ubiqui tin protea se [Arabi dopsis thalia na]
169082	ATU031 022	ATL8C1 8543:1 ..1716	nap				ATL8C1 8543:1 02..16 69	0.86	g47339 73	49	1984	2.8e- 145	(AC007 264) hypoth etical protei n [Arabi dopsis thalia na]

169083	ATU031 023	ATL8C2 0796:5 833..2 611	nap				ATL8C2 0796:5 757..2 611	0.86	g36458 99	49	2528	1.1e- 260	na] (U6840 8) 5, end not determ ined experi mental ly [Zea mays]
169084	ATU031 024	ATL8C3 9735:9 27..28 4	nap				ATL8C3 9735:7 20..28 4	0.86	g45389 11	49	670	1.2e- 46	(AL049 482) hypoth etical protei n [Arabi dopsis thalia na]
169085	ATU031 025	ATL8C3 0363:1 ..1089	nap				ATL8C3 0363:4 9..105 5	0.85	g26215 10	49	218	6.6e- 18	(AE000 828) sensor y transd uction histid ine kinase [Metha nobact erium thermo autotr ophicu m]
169086	ATU031 026	ATL8S2 7369:5	nap				ATL8S2 7369:5	0.83	g17312 22	49	370	4.9e- 28	HYPOTH ETICAL

169087	ATU031 027	ATL8C6 481:29 ..2379	nap							32..22 6	0.82	g46783 10	49	385	1.4e- 22	39.3 KD PROTEI N CY20G9 .29 [Mycob acteri um tuberc ulosis]
169088	ATU031 028	ATL8S6 834:67 5..1	nap							ATL8S6 834:60 5..16	0.82	g32202 02	49	183		(AL049 655) putati ve protei n [Arabi dopsis thalia nal]
169089	ATU031 029	ATL8C4 7264:1 320..3 21	nap							ATL8C4 7264:1 316..5 75	0.82	g22448 88	49	384	7.3e- 42	(AF053 760) hydrog en cyanid e syntha se HcnB [Pseud omonas fluore scens] (Z9733 8) simila rity to

169090	ATU031 030	ATL8C4 7255:1 086..1	nap					ATL8C4 7255:8 92..18	0.82	g12084 54	49	215	1.5e- 19	cytochrome P450 [Arabi dopsis thalia na] (D6400 4) hypoth etical protein [Synec hocyst is sp.]
169091	ATU031 031	ATL8C3 553:17 34..55 8	nap					ATL8C3 553:10 74..62 5	0.81	g30212 70	49	724	6.7e- 62	(AL022 347) serine /threo nine kinase -like protein [Arabi dopsis thalia na]
169092	ATU031 032	ATL8C2 8423:1 ..386	nap					ATL8C2 8423:2 ..355	0.81	g24952 06	49	210	7.3e- 19	HYPOTH ETICAL 28.6 KD PROTEI N IN GCVA- MLTA INTERG ENIC

169093	ATU031 033	ATL8C2 0203:3 611..2 416	nap						ATL8C2 0203:3 576..2 416	0.81	g43253 51	49	1821	2.5e- 194	REGION [Esche richia coli]
169094	ATU031 034	ATL8C1 6339:2 188..1	nap						ATL8C1 6339:2 188..5 57	0.81	g22450 43	49	2788	1.1e- 278	(AF128 394) simila r to Antirr hinum majus (garde n snapdr agon) TNP2 protei n (GB:X5 7297) [Arabi dopsis thalia na]
169095	ATU031 035	ATL8C4 1484:1 554..1	nap						ATL8C4 1484:1 442..2 25	0.80	g42638 27	49	1061	6.6e- 108	(Z9734 2) resist ance gene [Arabi dopsis thalia na] (AC006 067) putati ve recept or protei

169096	ATU031 036	ATL8C8 651:84 6..129 4	nap					ATL8C8 651:12 20..10 96	0.80	g38941 62	49	151	0.34	n kinase [Arabi dopsis thalia nal] (AC005 312) hypoth etical protei n [Arabi dopsis thalia nal]
169097	ATU031 037	ATL8C1 029:12 16..1	nap					ATL8C1 029:12 16..84	0.80	g22811 15	49	1065	3.7e- 72	(AC002 330) putati ve cullin -like 1 protei n [Arabi dopsis thalia nal]
169098	ATU031 038	ATL8C1 3024:5 159..1	nap					ATL8C1 3024:5 159..1 05	0.79	g25005 42	49	1105	1.1e- 97	PUTATI VE ATP- DEPEND ENT RNA HELICA SE YMR128 W [Sacch

169099	ATU031 039	ATL8C5 907:1. .1398	nap							ATL8C5 907:85 ..1298	0.78	g33778 16	49	1934		aromyc es cerevi siae]
169100	ATU031 040	ATL8C4 6595:1 785..5 30	nap							ATL8C4 6595:1 505..5 30	0.78	g22135 92	49	267	3.8e- 27	(AF076 275) contai ns simila rity to Arabid opsis thalia na retrot ranspo son Athila (GB:X8 1801) [Arabi dopsis thalia na]
169101	ATU031 041	ATL8C9 948:10 83..1	nap							ATL8C9 948:10 65..15 9	0.78	g43250 41	49	807	1.9e- 78	(AC000 348) T7N9.1 2 [Arabi dopsis thalia na] (AF117 339) FtsH- like protei n Pftf precur

169102	ATU031 042	ATL8C2 7994:7 31..1	nap					ATL8C2 7994:5 08..22 7	0.77		g23927 63	49	410		(AC002 534) hypoth etical protei n [Arabi dopsis thalia na]
169103	ATU031 043	ATL8C1 6767:1 174..1	nap					ATL8C1 6767:1 019..1 6	0.77		g44903 10	49	814	4.8e- 84	(AL035 678) somati c embryo genesi s recept or- like kinase -like protei n [Arabi dopsis thalia na]
169104	ATU031 044	ATL8S1 2688:5 89..1	nap					ATL8S1 2688:5 77..58	0.77		g17057 05, g92979 3	49, 40	236, 418	5.8e- 10, 1.5e- 18	CYTOCH ROME C-TYPE BIOGEN ESIS PROTEI N CYCL

169105	ATU031 045	ATL8S6 666:1. .557	nap							0.77	g37243 18	49	307			PRECUR SOR [Pseudomonas fluorescens] ; (Z47979) periplasmic or inner membrane associated protein [Pseudomonas fluorescens] (AB012956) probable sugar transferase [Vibrio cholerae] (AL034567) putative protein
169106	ATU031 046	ATL8C1 6569:1 ..1032	nap							0.76	g40493 45	49	352	3.2e- 39		

169107	ATU031 047	ATL8S1 1344:9 1..764	nap					ATL8S1 1344:9 4..757	0.76	g47045 62	49	597	1.0e- 58	[Arabi dopsis thalia na] (AF102 270) fumara se C [Pseud omonas putida]
169108	ATU031 048	ATL8C2 8414:1 ..723	nap					ATL8C2 8414:4 04..67 8	0.76	g34260 45	49	146	3.0e- 14	(AC005 168) hypoth etical protei n [Arabi dopsis thalia na]
169109	ATU031 049	ATL8C4 8868:1 375..8 00	nap					ATL8C4 8868:1 314..8 00	0.76	g47048 24	49	779	4.0e- 78	(AF139 377) stearo yl acyl carrie r protei n desatu rase Lladd3A 20 [Lupin us luteus]
169110	ATU031	ATL8C1	nap					ATL8C1	0.76	g45389	49	1178	1.9e-	(AL049

169117	ATU031 057	ATL8C6 17:51. .2142	nap					ATL8C6 17:51. .1479	0.71	g32427 13	49	1141	2.0e- 113	(AC003 040) putati ve transp osase [Arabi dopsis thalia na]	aromyc es cerevi siae]
169118	ATU031 058	ATL8C9 39:181 2..88	nap					ATL8C9 39:165 2..88	0.70	g22451 36	49	1955	7.9e- 199	(Z9734 4) trehal ose-6- phosph ate syntha se homolo g [Arabi dopsis thalia na]	
169119	ATU031 059	ATL8C3 5059:1 716..3 40	nap					ATL8C3 5059:1 653..5 13	0.70	g40637 45	49	819	5.9e- 53	(AC005 851) hypoth etical protei n [Arabi dopsis thalia na]	
169120	ATU031 060	ATL8S2 9611:1	nap					ATL8S2 9611:1	0.70	g56384 5	49	109	1.4e- 06	(Z4643 2) orf	

169123	ATU031 063	ATL8C9 345:66 30..17 41	nap						ATL8C9 345:66 30..17 41	0.68	g12421 4	49	61	0.20	thalia nal TRANSL ATION INITIA TION FACTOR IF-3 [Esche richia coli]
169124	ATU031 064	ATL8C3 0221:1 ..1114	nap						ATL8C3 0221:9 7..915	0.68	g26186 86	49	743	8.4e- 80	(AC002 510) hypoth etical protei n [Arabi dopsis thalia nal]
169125	ATU031 065	ATL8S2 8353:3 96..48	nap						ATL8S2 8353:3 16..48	0.67	g19222 42	49	39	0.0002 8	(Y1008 4) hypoth etical protei n [Arabi dopsis thalia nal]
169126	ATU031 066	ATL8C3 6693:1 756..1	nap						ATL8C3 6693:1 509..4 93	0.67	g37460 69	49	2346	1.9e- 242	(AC005 311) putati ve revers e transc riptase

169127	ATU031 067	ATL8C4 6869:1 ..1343	nap								ATL8C4 6869:6 0..128 7	0.67	g21911 67	49	1942	3.8e- 176	[Arabi dopsis thalia na] (AF007 270) A IG00 2P16.1 8 gene produc t [Arabi dopsis thalia na]
169128	ATU031 068	ATL8C2 6619:1 ..2220	nap								ATL8C2 6619:4 7..203 1	0.67	g43888 29	49	1463	7.0e- 138	(AC006 528) putati ve pol polypr oteins with a Zn- finger CCHC type domain (prosi te:QDO C50158) and a DDE integr ase signat ure motif [Arabi dopsis thalia

169129	ATU031 069	ATL8C4 4572:7 54..1	nap				ATL8C4 4572:7 54..10 6	0.65	g48503 91	49	705	9.7e- 61	na] (AC007 357) Identi cal to gb D78 605 cytoch rome P450 monoox ygenas e from Arabid opsis thalia na and is a member of the PF 000 67 Cytoch rome P450 family . ESTs gb Z18 072, gb Z35 218 and gb T43 466 come from this gene. []
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169130	ATU031 070	ATL8S2 5028:1 ..553	nap				ATL8S2 5028:4 27..21 8	0.65	g13635 28	49	539	3.3e- 31	gag protei n - maize [Zea mays]
169131	ATU031 071	ATL8C4 2395:4 6..625	nap				ATL8C4 2395:4 6..479	0.64	g41546 02	49	196	4.0e- 16	(AE001 448) putati ve [Helic obacte r pylori J99]
169132	ATU031 072	ATL8C3 745:66 1..213 5	nap				ATL8C3 745:66 4..144 0	0.64	g37639 31	49	490	6.9e- 51	(AC004 450) hypoth etical protei n [Arabi dopsis thalia na]
169133	ATU031 073	ATL8C4 070:71 ..1886	nap				ATL8C4 070:17 9..966	0.62	g43097 55	49	599	4.6e- 54	(AC006 217) putati ve transp osase [Arabi dopsis thalia na]
169134	ATU031 074	ATL8C4 9715:9 44..1	nap				ATL8C4 9715:9 39..22 1	0.62	g44540 20	49	488	4.1e- 34	(AL035 396) putati ve protei

169135	ATU031 075	ATL8C4 2857:1 ..2516	nap					ATL8C4 2857:4 1..245 9	0.61	g45220 05	49	1798	8.9e- 181	n [Arabi dopsis thalia na] (AC007 069) putati ve revers e transc riptas e [Arabi dopsis thalia na]
169136	ATU031 076	ATL8C1 2042:1 ..2000	nap					ATL8C1 2042:4 7..130 8	0.61	g44068 12	49	529	4.6e- 51	(AC006 201) putati ve DNA bindin g protei n [Arabi dopsis thalia na]
169137	ATU031 077	ATL8C5 467:81 7..1	nap					ATL8C5 467:77 9..378	0.59	g34137 10	49	974	2.0e- 85	(AC004 747) hypoth etical protei n [Arabi dopsis thalia na]

169138	ATU031 078	ATL8C3 5387:1 ..1601	nap				ATL8C3 5387:6 3..151 2	0.59	g22448 90	49	1660	1.5e- 167	(Z9733 8) unname d protei n produc t [Arabi dopsis thalia na]
169139	ATU031 079	ATL8C3 9237:1 ..807	nap				ATL8C3 9237:1 84..80 7	0.58	g44327 95	49	137	1.0e- 05	(AC006 437) putati ve protei n 2 of of the En/Spm transp osable elemen t system of Zea mays [Arabi dopsis thalia na]
169140	ATU031 080	ATL8S5 698:44 9..1	nap				ATL8S5 698:44 9..95	0.58	g27914 05	49	160	8.2e- 12	(AL021 184) trxB [Mycob acteri um tuberc ulosis]

169141	ATU031 081	ATL8C2 0803:3 40..16 28	nap				ATL8C2 0803:3 52..16 05	0.57	g36000 40	49	814	1.9e- 78	(AF080 119) simila r to Arabid opsis thalia na diseas e resist ance protei n RPS2 (GB:U1 4158) [Arabi dopsis thalia na]
169142	ATU031 082	ATL8C2 3646:1 711..1	nap				ATL8C2 3646:1 624..2 82	0.57	g33193 72	49	1739	1.1e- 174	(AF077 409) simila r to revers e transc riptas es (PFam: rvt.hm m, score: 60.13) [Arabi dopsis thalia na]
169143	ATU031 083	ATL8C8 850:1.	nap				ATL8C8 850:14	0.57	g49268 26	49	668	1.4e- 64	(AC004 135)

169144	ATU031 084	.900	nap					4..886	ATL8S1 0689:1 35..29 3	0.56	g29833 64	49	189	1.9e- 16	AE000 708) sialog lycopr otease [Aquif ex aeolic us]	T17H7. 11 [Arabi dopsis thalia na]
169145	ATU031 085	ATL8C4 4287:4 72..13 10	nap					ATL8C4 4287:4 72..13 10	0.56	g48951 65	49	636	1.0e- 42	(AC007 231) unknow n protei n [Arabi dopsis thalia na]	(AC007 231) unknow n protei n [Arabi dopsis thalia na]	
169146	ATU031 086	ATL8C2 6088:1 995..5 31	nap					ATL8C2 6088:1 995..5 98	0.54	g37860 12	49	84	0.16	(AC005 499) putati ve acid phosph atase [Arabi dopsis thalia na]	(AC005 499) putati ve acid phosph atase [Arabi dopsis thalia na]	
169147	ATU031 087	ATL8S1 4064:4 73..1	nap					ATL8S1 4064:2 95..30	0.54	g73228 3	49	162	4.2e- 17	HYPOTH ETICAL 35.5 KD	HYPOTH ETICAL 35.5 KD	

169148	ATU031 088	ATL8C3 7193:1 007..1 994	nap					ATL8C3 7193:1 814..1 537	0.53	g41725 9	49	124			PROTEI N IN RPLI- CPDB INTERG ENIC REGION (F324) [Esche richia coli]
169149	ATU031 089	ATL8C3 4504:1 537..1	nap					ATL8C3 4504:1 537..3 22	0.53	g29824 52	49	2259	9.7e- 196		ACYL- [Yersi nia entero coliti ca]
169150	ATU031 090	ATL8C2 2835:4 142..1 95	nap					ATL8C2 2835:4 142..2 21	0.53	g45396 60	49	2646	2.9e- 301		(AL022 223) recept or protei n kinase -like protei n [Arabi dopsis thalia na]
169151	ATU031	ATL8C2	nap					ATL8C2	0.52	g45023	49, 40	1442,	5.2e-		(AF061 282) polypr otein [Sorgh um bicolo r] ataxia

091	4851:9 978..1				4851:5 155..2 29	25, 921911 30	284	152, 4.4e- 19	telang iectas ia and Rad3 relate d [Homo sapien sl]; (AF007 269) A IG00 2N01.7 gene produc t [Arabi dopsis thalia na]
169152	ATU031 092	ATL8S5 145:1. .429	nap		ATL8S5 145:11 3..429	g11731 63	100	2.5e- 07	RNA POLYME RASE SIGMA- E FACTOR (SIGMA -24) [Haemo philus influe nzae Rd]
169153	ATU031 093	ATL8C1 9274:2 526..4 040	nap		ATL8C1 9274:2 526..3 990	g38941 57	597	7.6e- 44	(AC005 312) putati ve protei n kinase

169154	ATU031 094	ATL8C2 0019:2 85..59 1	nap					ATL8C2 0019:3 71..54 4	0.51	g28326 48	49	246			3', partial [Arabi dopsis thalia nal]
															(AL021 710) membra ne- bound small GTP- bindin g - like protei n [Arabi dopsis thalia nal]
169155	ATU031 095	ATL8C1 6640:4 313..2 109	nap					ATL8C1 6640:4 197..2 109	0.51	g40637 60	49	1150	2.6e- 105		(AC005 561) putati ve POL3 protei n [Arabi dopsis thalia nal]
169156	ATU031 096	ATL8C5 44:211 9..1	nap					ATL8C5 44:211 9..97	0.50	g49143 61	49	2257	6.0e- 224		(AC007 289) putati ve revers e

169157	ATU031 097	ATL8C1 6447:4 206..1	nap					ATL8C1 6447:4 206..3 20	0.49	g48369 30	49	2730	9.9e- 268	(AC006 085) Hypoth etical protei n [Arabi dopsis thalia na]
169158	ATU031 098	ATL8S2 0362:1 ..488	nap					ATL8S2 0362:4 00..62	0.49	g28334 15, g54957 7	49, 30	178, 160	7.7e- 18, 5.8e- 13	HYPOTH ETICAL 25.7 KD PROTEI N IN SURE- CYSC INTERG ENIC REGION [Esche richia coli]; HYPOTH ETICAL 17.1 KD PROTEI N IN MECB- GLTX INTERG

169159	ATU031 099	ATL8C2 9275:1 ..639	nap						ATL8C2 9275:1 37..63 9	0.49	g28047 00	49	747	6.1e- 68	ENIC REGION [Bacil lus subtil is] (AF030 361) transp osase [Strep tococc us pneumo niae]
169160	ATU031 100	ATL8C1 5320:7 91..1	nap						ATL8C1 5320:7 15..15 9	0.49	g43253 48	49	165	3.1e- 13	(AF128 394) contai ns simila rity to phosph ate transp orters [Arabi dopsis thalia na]
169161	ATU031 101	ATL8C4 2967:1 609..1	nap						ATL8C4 2967:1 609..2 6	0.48	g42204 56	49	577	9.1e- 61	(AC006 216) Strong simila rity to [Arabi dopsis thalia na]

169162	ATU031 102	ATL8C3 291:27 92..1	nap				ATL8C3 291:24 53..40 7	0.48	g33778 31	49	969	6.7e- 95	(AF075 598) simila r to maize transp oson MuDR mudrA (GB:M7 6978) [Arabi dopsis thalia na]
169163	ATU031 103	ATL8C3 2617:1 375..1	nap				ATL8C3 2617:6 02..23	0.46	g19349 72	49	672	7.0e- 74	(Y0861 1) dihydr opteri n pyroph osphok inase /dihyd ropter oate syntha se [Pisum sativu m]
169164	ATU031 104	ATL8C3 6438:3 35..1	nap				ATL8C3 6438:3 35..64	0.42	g36680 82	49	104	1.9e- 06	(AC004 667) putati ve DAL1 protei n [Arabi dopsis

169165	ATU031 105	ATL8S2 4674:5 52..1	nap					ATL8S2 4674:3 55..14	0.42	g47339 82	49	556	1.0e- 57	thalia na] (AC007 268) hypoth etical protei n [Arabi dopsis thalia na]
169166	ATU031 106	ATL8S1 159:36 4..1	nap					ATL8S1 159:36 4..44	0.42	g46894 52	49	394	4.5e- 38	(AC006 267) putati ve transp oson protei n [Arabi dopsis thalia na]
169167	ATU031 107	ATL8C3 0414:1 ..1128	nap					ATL8C3 0414:6 1..369	0.41	g30803 54	49	115	2.3e- 07	(AL022 580) hypoth etical protei n [Arabi dopsis thalia na]
169168	ATU031 108	ATL8C4 4486:1 ..1529	nap					ATL8C4 4486:3 9..141 8	0.41	g38829 98	49	175	1.1e- 14	(AF073 482) myotub ularin relate d

169173	ATU031 113	76	ATL8C1 5320:6 92..79 1	nap									g36953 98	49	120	5.5e- 07	(AF096 372) No defini tion line found [Arabi dopsis thalia na]
169174	ATU031 114	ATL8C3 0048:1 ..275	nap										g42181 15	49	140	3.0e- 07	(AL035 353) putative protein [Arabi dopsis thalia na]
169175	ATU031 115	ATL8C2 1799:6 203..5 818	nap										g22136 26	49	231	2.1e- 20	(AC000 103) F21J9. 18 [Arabi dopsis thalia na]
169176	ATU031 116	ATL8S2 0263:4 53..65 6	nap										g39258 19	49	205	1.5e- 17	(AB020 211) unnamed

169177	ATU031 117	ATL8C3 9310:1 ..1314	nap								g47739 08	49	982	3.0e- 100	(AF147 259) No defini tion line found [Arabi dopsis thalia na]	protein product [Roseo bacter denitrifi cans]
169178	ATU031 118	ATL8C2 290:13 2..967	nap								g27650 83	49	346	1.2e- 37	(Y1061 7) 12- oxophy todien oate reduct ase [Arabi dopsis thalia na]	
169179	ATU031 119	ATL8S2 1474:3 93..2	nap								g63947 4	49	148	6.6e- 13	(U1959 2) cholin e transp orter [Bos taurus]	

169183	ATU031 123	ATL8C1 1350:1 ..358	nap						g36953 81	49	318	2.5e- 30	(AF096 370) contai ns simila rity to Arabid opsis thalia na revers e- transc riptas e-like protei ns [Arabi dopsis thalia na]
169184	ATU031 124	ATL8C3 3302:3 645..7 75	nap						g41153 62	49	855	1.6e- 49	(AC005 957) hypoth etical protei n [Arabi dopsis thalia na]
169185	ATU031 125	ATL8C1 6906:5 66..83	nap						g10763 08	49	706	2.2e- 41	RNA- bindin g protei n cp33 precur sor - Arabid

[illegible]

169186	ATU031 126	ATL8C2 6275:1 ..579	nap							g20886 41	49	303	1.1e- 33	(AF002 109) Myb isolog [Arabi dopsis thalia na]	opsis thalia na [Arabi dopsis thalia na]
169187	ATU031 127	ATL8S1 560:56 8..146	nap							g29824 55	49	128	3.7e- 07	(AL022 223) putati ve uracil phosph oribos yl transf erase [Arabi dopsis thalia na]	(AL022 223) putati ve uracil phosph oribos yl transf erase [Arabi dopsis thalia na]
169188	ATU031 128	ATL8C4 0822:5 7..901	nap							g16286 22	49	334	2.9e- 36	(U7263 1) flavon ol syntha se [Arabi dopsis thalia na]	(U7263 1) flavon ol syntha se [Arabi dopsis thalia na]
169189	ATU031	ATL8C9	nap							g45394	49	330	2.6e-	(AL049	(AL049

129	859:1. .558								50			37	500) putati ve protei n [Arabi dopsis thalia na]
169190	ATU031 130	ATL8C3 088:65 1..104 8	nap						g44327 95	49	395	4.2e- 23	(AC006 437) putati ve protei n 2 of of the En/Spm transp osable elemen t system of Zea mays [Arabi dopsis thalia na]
169191	ATU031 131	ATL8C4 4095:1 336..1 577	nap						g43888 22	49	252	1.4e- 23	(AC006 528) hypoth etical protei n [Arabi dopsis thalia na]
169192	ATU031 132	ATL8S2 8579:5	nap						g45860 27	49	226	6.7e- 21	(AC007 109)

169193	ATU031 133	37..13 0	nap	ATL8C4 463:1. .872	g99755	49	1023	1.9e- 101	putative ribosomal protein L14 [Arabidopsis thaliana]
169194	ATU031 134	ATL8C1 1922:6 28..1	nap		g53729 6	49	189	2.9e- 11	RNA-directed DNA polymerase (EC 2.7.7.49) - Arabidopsis thaliana retrotransposon Tat-1 (fragment) [Arabidopsis thaliana]
									(U13924) chalcone reductase [Medicago]

169199	ATU031 139	ATL8C1 5:1102 ..463	nap							g26424 38	49	992	1.8e- 99	(AC002 391) putati ve indole -3- acetat e beta- glucos yltran sferas e [Arabi dopsis thalia na]	unknown protei n [Arabi dopsis thalia na]
169200	ATU031 140	ATL8C4 0392:5 00..11 0	nap							g45824 55	49	177	4.1e- 17	(AC007 071) putati ve recept or protei n kinase [Arabi dopsis thalia na]	(AC007 071) putati ve recept or protei n kinase [Arabi dopsis thalia na]
169201	ATU031 141	ATL8C5 0070:2	nap							g45860 66	49	540	1.4e- 62	(AC006 194)	(AC006 194)

169202	ATU031 142	ATL8C5 388:11 4..106 6	nap							g44694 08	49	219	1.7e- 20	(AF116 527) MADS box protei n FLOWER ING LOCUS F [Arabi dopsis thalia na]
169203	ATU031 143	ATL8S2 2944:1 ..263	nap							g21905 40	49	314	2.6e- 28	(AC001 229) Simila r to Arabid opsis TFL1 (gb U7 7674). [Arabi dopsis thalia na]
169204	ATU031 144	ATL8C1 0795:2	nap							g48951 65	49	593	1.1e- 48	(AC007 231)

169205	ATU031 145	ATL8C3 6024:4 02..18 94	nap										g31933 18	49	523	4.1e- 42	(AF069 299) No defini tion line found [Arabi dopsis thalia na]	unknow n protei n [Arabi dopsis thalia na]
169206	ATU031 146	ATL8S1 4390:4 2..545	nap										g47739 03	49	272	1.8e- 26	(AF074 021) putati ve transp oson protei n [Arabi dopsis thalia na]	
169207	ATU031 147	ATL8C4 6203:1 ..834	nap										g31525 98	49	353	2.4e- 34	(AC002 986) Contai ns simila rity to C2- HC type	

[illegible][illegible]

169209	ATU031 149	ATL8C4 2585:1 136..1	nap										g49268 20	49	153	7.1e- 26	thalia nal (AC004 135) T17H7. 5 [Arabi dopsis thalia nal]
169210	ATU031 150	ATL8C3 1191:1 ..695	nap										g41917 74	49	754	1.9e- 76	(AC005 917) putati ve beta- 1,3- endogl ucanas e [Arabi dopsis thalia nal]
169211	ATU031 151	ATL8S6 279:47 0..65	nap										g45391 74	49	109		(AL049 485) putati ve DNA- bindin g protei n [Strep tomyce s coelic olor]
169212	ATU031 152	ATL8S1 0028:1 ..583	nap										g29839 17	49	219	3.4e- 24	(AE000 745) GcpE

156	7788:2 229..1 6	ATU031 157	ATL8C2 034:70 4..167	nap							65					238	957) revers e transc riptas e-like protei n [Arabi dopsis thalia na]
169217		ATU031 157	ATL8C2 034:70 4..167	nap							g28015 36	49	405			2.1e- 40	(AF039 531) lysoph osphol ipase homolo g [Oryza sativa]
169218		ATU031 158	ATL8S3 201:59 4..1	nap							g18061 54	49	158			2.6e- 10	(Z8439 5) hypoth etical protei n Rv0688 [Mycob acteri um tuberc ulosis]
169219		ATU031 159	ATL8C4 3394:1 637..2 96	nap							g45811 64	49	691				(AC006 220) putati ve polypr.

163	0088:1 ..789									96				18	018) simila r to the GDSL family of lipoly tic enzyme s [Arabi dopsis thalia na]
169224	ATU031 164	ATL8C4 3328:2 431..1	nap							g43357 20, g31842 75	49, 32	2223, 239			(AC006 248) putati ve revers e transc riptas e Tal- 1 [Arabi dopsis thalia na]; (AC004 136) hypoth etical protei n [Arabi dopsis thalia na]
169225	ATU031	ATL8C6	nap							g33553	49	790	1.1e-		(AJ009

	165	371:43 39..32 58								08						81	695) wall- associ- ated kinase 4 [Arabi dopsis thalia na]
169226	ATU031 166	ATL8C3 1693:2 399..1	nap							g41855 99, g32427 11	49, 39	181, 874				4.6e- 15, 1.1e- 17	(AB010 708) Anthoc yanin 5- aromat ic acyltr ansfer ase [Genti ana triflo ral]; (AC003 040) hypoth etical protei n [Arabi dopsis thalia na]
169227	ATU031 167	ATL8S4 971:61 6..1	nap							g48357 95	49	301				5.7e- 31	(AC007 296) F25C20 .23 [Arabi dopsis thalia na]

172	4464:1 808..1 503	nap							86				29	300) putati ve protei n [Arabi dopsis thalia na]
169233	ATU031 173	ATL8S1 7640:3 60..1	nap						0.98	g25588 47	48	267	2.0e- 22	(AF019 110) PapII homolo g [Salmo nella typhim urium]
169234	ATU031 174	ATL8C3 8447:2 05..10 51	nap						0.97	g32491 05	48	593	3.7e- 64	(AC003 114) Contai ns simila rity to protei n phosph atase 2C (ABI1) gb X78 886 from A. thalia na. [Arabi dopsis thalia

169235	ATU031 175	ATL8C2 5049:4 89..1	nap				ATL8C2 5049:4 89..31	0.96	g42189 63	48	480	4.4e- 47	na] (AF093 672) xylogl ucan endotr ansgly cosyla se [Arabi dopsis thalia na]
169236	ATU031 176	ATL8C2 3934:1 797..4 58	nap				ATL8C2 3934:1 444..4 58	0.96	g30212 67	48	1330	4.3e- 112	AL022 347) serine /threo nine kinase - like protei n [Arabi dopsis thalia na]
169237	ATU031 177	ATL8S9 71:85. .381	nap				ATL8S9 71:245 ..381	0.96	g46626 46	48	86	0.94	(AC006 429) hypoth etical protei n [Arabi dopsis thalia na]
169238	ATU031 178	ATL8C3 6701:1 ..663	nap				ATL8C3 6701:1 63..65 7	0.95	g45875 40	48	717	1.5e- 74	(AC006 577) Belong s to

169239	ATU031 179	ATL8S2 6684:1 ..369	nap						ATL8S2 6684:3 03..17	0.95	g40076 92	48	216			the PF1006 57 Lipase /Acylh ydrola se with GDSL- motif family [Arabi dopsis thalia na]
169240	ATU031 180	ATL8S9 350:1. .585	nap						ATL8S9 350:72 ..485	0.95	g34492 69	48	368	9.2e- 34		(AL034 446) hypoth etical protei n SC1A9. 07 [Strep tomyce s coelic olor] (AL031 317) hypoth etical protei n SC6G4. 35 [Strep tomyce s

169241	ATU031 181	ATL8C4 9251:1 ..827	nap				ATL8C4 9251:7 2..715	0.94	g44159 14	48	844	7.7e- 88	coelic olor] (AC006 282) unknown n protei n [Arabi dopsis thalia na]
169242	ATU031 182	ATL8C2 2748:5 17..1	nap				ATL8C2 2748:5 17..23	0.94	g44067 85	48	657	4.2e- 58	(AC006 532) hypoth etical protei n [Arabi dopsis thalia na]
169243	ATU031 183	ATL8C8 62:107 4..1	nap				ATL8C8 62:105 3..150	0.94	g48502 87	48	879	5.6e- 59	(AL049 876) 98b like protei n [Arabi dopsis thalia na]
169244	ATU031 184	ATL8C2 5052:1 ..616	nap				ATL8C2 5052:4 9..486	0.94	g13467 82	48	665	9.3e- 70	SERINE /THREO NINE PROTEI N PHOSPH ATASE PP-X

169245	ATU031 185	ATL8C1 5012:7 03..1	nap					ATL8C1 5012:6 34..31 3	0.94	g31767 07	48	457	3.8e- 47	(AC002 392) putati ve prolin e-rich protei n APG [Arabi dopsis thalia na]
169246	ATU031 186	ATL8C5 132:12 84..57 2	nap					ATL8C5 132:12 16..57 2	0.94	g33556 26	48	722	3.6e- 54	(Y0920 4) histid inol- phosph ate aminot ransfe rase [Nicot iana tabacu m]
169247	ATU031 187	ATL8C1 2694:1 ..521	nap					ATL8C1 2694:2 7..521	0.93	g44558 00	48	167	2.6e- 13	(Z9734 3) unname d protei n produc t [Arabi

169248	ATU031 188	ATL8S2 1387:7 25..1	nap					ATL8S2 1387:5 04..13 3	0.93	g45389 96	48	528	3.6e- 25	dopsis thalia nal (AL049 481) AIG1- like protei n [Arabi dopsis thalia nal]
169249	ATU031 189	ATL8C3 9510:1 ..1072	nap					ATL8C3 9510:1 04..10 35	0.92	g40068 73	48	1100	6.0e- 95	(Z9970 7) hypoth etical protei n [Arabi dopsis thalia nal]
169250	ATU031 190	ATL8C1 0990:1 ..1790	nap					ATL8C1 0990:2 17..17 28	0.91	g22479 7	48	1196	2.8e- 120	urease [Canav alia ensifo rmis]
169251	ATU031 191	ATL8C3 107:15 15..1	nap					ATL8C3 107:15 09..38	0.91	g36458 99	48	2265	4.3e- 221	(U6840 8) 5' end not determ ined experi mental ly [Zea mays]
169252	ATU031	ATL8C5	nap					ATL8C5	0.91	g23426	48	695		(AC000

192	980:13 58..15 4					980:10 78..15 4	82					106) Contai ns simila rity to Rattus AMP- activa ted protei n kinase (gb X9 5577). [Arabi dopsis thalia na]
169253	ATU031 193	ATL8C7 202:33 03..16 83	nap			ATL8C7 202:26 59..16 98	g34137 01	48	1405	2.5e- 150	(AC004 747) hypoth etical protei n [Arabi dopsis thalia na]	
169254	ATU031 194	ATL8C2 7312:4 33..22 20	nap			ATL8C2 7312:4 33..21 00	g42622 39	48	357		(AC006 200) putati ve membra ne transp orter [Arabi dopsis thalia	

169255	ATU031 195	ATL8C3 5078:1 326..1	nap				ATL8C3 5078:1 219..5 2	0.89	g45664 35	48	486	4.5e- 53	na] (AF087 672) eRFS [Mus muscul us]
169256	ATU031 196	ATL8C7 243:1. .2096	nap				ATL8C7 243:18 8..208 0	0.89	g36953 87	48	1237	9.5e- 119	(AF096 371) contai ns simila rity to repl ication protei n Al [Arabi dopsis thalia na]
169257	ATU031 197	ATL8C1 5926:7 76..61	nap				ATL8C1 5926:7 26..61	0.89	g18352 45	48	83	2.0e- 05	(X7848 2) Fc- gamma recept or [Strep tococc us pyogen es]
169258	ATU031 198	ATL8C2 2675:1 95..20 47	nap				ATL8C2 2675:6 19..16 56	0.89	g45393 47	48	462	3.2e- 31	(AL035 539) putati ve growth regula tor protei

169259	ATU031 199	ATL8C4 2494:1 ..2166	nap					ATL8C4 2494:3 56..21 66	0.87	g30565 92	48	1702	3.8e- 169	n [Arabi dopsis thalia na]
169260	ATU031 200	ATL8C3 7998:9 41..1	nap					ATL8C3 7998:3 59..42	0.87	g27393 85	48	438	2.6e- 39	(AC004 255) T1F9.1 3 [Arabi dopsis thalia na]
169261	ATU031 201	ATL8S7 424:64 8..1	nap					ATL8S7 424:64 8..13	0.87	g29828 47	48	276	1.0e- 18	(AE000 673) putati ve protei n [Aquif ex aeolic us]
169262	ATU031 202	ATL8C2 2940:1 ..895	nap					ATL8C2 2940:4 4..895	0.87	g45073 19	48	53	0.16	surfei t 1 [Homo sapien s]

169263	ATU031 203	ATL8S2 1407:3 99..1	nap				ATL8S2 1407:3 99..39	0.86	g39144 44	48	373	1.2e- 34	NON- HEME CHLORO PEROXI DASE (CHLOR IDE PEROXI DASE) (CPO- F) (CHLOR OPEROX IDASE F) [Pseud omonas fluore scens]
169264	ATU031 204	ATL8S1 1682:5 29..1	nap				ATL8S1 1682:4 11..31	0.85	g17874 50	48	241	1.1e- 14	(AE000 218) putati ve dihydr oxyace tone kinase (EC 2.7.1. 2) [Esche richia coli]
169265	ATU031 205	ATL8C4 9167:1 359..4 64	nap				ATL8C4 9167:1 253..4 74	0.85	g38763 53	48	252	2.9e- 19	(Z6831 5) Simila rity to Human cleava

169268	207	262:75 ..218				262:78 ..218	78	15	RIBOSO MAL PROTEI N L37 []
	ATU031 208	ATL8C1 2425:2 089..8 59	nap			ATL8C1 2425:2 034..8 59	0.84 g44159 11	48 1267	(AC006 282) putati ve polyA bindin g protei n [Arabi dopsis thalia na]
169269	ATU031 209	ATL8C8 700:29 9..287 1	nap			ATL8C8 700:29 9..284 0	0.83 g47339 87, g47739 12	48, 36 88, 261	(AC007 209) hypoth etical protei n [Arabi dopsis thalia na]; (AF147 259) No defini tion line found [Arabi dopsis thalia na]
169270	ATU031	ATL8C2	nap			ATL8C2	0.83 g16174	48 275	(X9760

	210	8888:5 66..81 1					8888:5 66..77 0	71				06	4) ORFI [Zea diplop erenni s]
169271	ATU031 211	ATL8C3 5168:2 167..9 05	nap				ATL8C3 5168:1 903..9 05	0.82	g17232 39	48	231	5.5e- 15	HYPOTH ETICAL 35.7 KD PROTEI N C26A3. 11 IN CHROMO SOME I [Schiz osacch aromyc es pombe]
169272	ATU031 212	ATL8C3 0299:4 31..72 9	nap				ATL8C3 0299:4 31..61 4	0.82	g14917 10	48	97	2.0e- 06	(X9650 6) alpha subuni t; forms hetero dimer with NC2 alpha/ Dr1 [Homo sapien s]
169273	ATU031 213	ATL8C1 1842:1 ..755	nap				ATL8C1 1842:5 36..33 5	0.82	g30803 75	48	1206	3.1e- 90	(AL022 580) putati ve

169274	ATU031 214	ATL8S1 6284:1 9..557	nap					ATL8S1 6284:1 9..394	0.82		g13635 28	48	715	1.1e- 62	gag protei n - maize [Zea mays]	protei n [Arabi dopsis thalia na]
169275	ATU031 215	ATL8C4 2985:6 25..1	nap					ATL8C4 2985:4 58..23	0.81		g47739 03	48	189	7.5e- 21	(AF074 021) putati ve transp oson protei n [Arabi dopsis thalia na]	
169276	ATU031 216	ATL8S3 0678:5 65..17 2	nap					ATL8S3 0678:5 61..29 0	0.81		g41159 44	48	341	1.3e- 12	(AF118 223) contai ns simila rity to human autoim mune regula tor AIRE-1 (SW:04 3918 [Arabi	

169277	ATU031 217	ATL8C1 4157:1 ..1103	nap					ATL8C1 4157:1 20..10 69	0.81	g11684 70	48	288	8.4e- 33	PROTEI N KINASE APK1A [Arabi dopsis thalia na]
169278	ATU031 218	ATL8C8 878:39 1..825	nap					ATL8C8 878:39 1..737	0.81	g46805 04	48	336	8.2e- 35	(AF119 222) hypoeth etical prote n [Oryza sativa]
169279	ATU031 219	ATL8C3 4364:6 63..1	nap					ATL8C3 4364:5 48..38	0.80	g11715 77	48	531	4.4e- 57	(X9534 3) hypers ensiti vity- relate d gene [Nicot iana tabacu m]
169280	ATU031 220	ATL8S3 569:1. ..514	nap					ATL8S3 569:57 ..514	0.80	g21459 17	48	116	2.7e- 07	mssA homolo g - Mycoba cteriu m leprae [Mycob acteri

169281	ATU031 221	ATL8S1 7403:5 51..71	nap					ATL8S1 7403:1 65..71	0.80	g38602 46	48	496	1.1e- 38	(AC005 824) putati ve revers e- transc riptas e protei n [Arabi dopsis thalia na]	um leprae]
169282	ATU031 222	ATL8C3 1204:7 87..1	nap					ATL8C3 1204:5 10..14 4	0.79	g17812 99	48	268	5.6e- 30	(Y0950 6) transf ormer- SR ribonu cleopr oteins [Nicot iana tabacu m]	
169283	ATU031 223	ATL8C4 6191:1 215..1	nap					ATL8C4 6191:1 171..1 36	0.79	g30471 04	48	927	9.4e- 85	(AF058 919) No defini tion line found [Arabi dopsis thalia	

169284	ATU031 224	ATL8S1 7263:3 5..471	nap				ATL8S1 7263:5 2..426	0.78	g29244 58	48	372	3.2e- 36	na] (AL022 022) hypoth etical protei n Rv3521 [Mycob acteri um tuberc ulosis]
169285	ATU031 225	ATL8C4 9488:1 ..1290	nap				ATL8C4 9488:3 54..92 9	0.78	g42622 22	48	886	1.4e- 95	(AC006 200) putati ve RNA helica se A, 3' partia l [Arabi dopsis thalia na]
169286	ATU031 226	ATL8S2 0578:1 ..529	nap				ATL8S2 0578:4 9..515	0.78	g54007 7	48	295	1.7e- 22	(U1376 7) HlyA [Anaba ena sp.]
169287	ATU031 227	ATL8C3 0492:1 ..629	nap				ATL8C3 0492:3 78..17 3	0.77	g22450 94	48	606	1.0e- 41	(Z9734 3) hypoth etical protei n [Arabi

169288	ATU031 228	ATL8S1 127:63 5..1	nap					ATL8S1 127:27 6..201	0.77	g41853 11	48	889	1.3e- 91	(AF090 446) polypr oteins [Zea mays]
169289	ATU031 229	ATL8C1 7241:1 358..1	nap					ATL8C1 7241:1 325..3 37	0.77	g33778 16	48	1939	2.0e- 186	(AF076 275) contai ns simila rity to Arabid opsis thalia na retrot ranspo son Athila (GB:X8 1801) [Arabi dopsis thalia na]
169290	ATU031 230	ATL8C3 3397:2 060..1	nap					ATL8C3 3397:1 060..3 20	0.77	g34260 39	48	527	2.3e- 52	(AC005 168) unknow n protei n [Arabi dopsis thalia na]

169291	ATU031 231	ATL8C2 1513:9 31..1	nap				ATL8C2 1513:9 31..48	0.77	g42637 14	48	139	1.2e- 09	(AC006 223) putati ve integr al membra ne protei n [Arabi dopsis thalia na]
169292	ATU031 232	ATL8C2 11:579 1..511 8	nap				ATL8C2 11:570 5..532 8	0.76	g45672 95	48	657	5.0e- 64	(AC006 918) putati ve pol ypr otei n [Arabi dopsis thalia na]
169293	ATU031 233	ATL8C4 3453:1 612..3 80	nap				ATL8C4 3453:1 583..4 09	0.76	g42630 63	48	714		(AC005 142) hypoth etical protei n [Arabi dopsis thalia na]
169294	ATU031 234	ATL8C3 5604:1 840..1 218	nap				ATL8C3 5604:1 665..1 218	0.75	g19232 56	48	452	6.8e- 34	(U8678 2) 26S protea some- associ ated

169295	ATU031 235	ATL8C1 3376:2 291..1 703	nap				ATL8C1 3376:2 050..1 764	0.74	g32928 33	48	571	1.3e- 22	padl homolo g [Homo sapien s] (AL031 018) putati ve membra ne protei n [Arabi dopsis thalia na]
169296	ATU031 236	ATL8C1 8080:1 ..546	nap				ATL8C1 8080:1 14..33 8	0.74	g44553 00	48	607	3.7e- 58	(AL035 528) putati ve pectat e lyase All (fragm ent) [Arabi dopsis thalia na]
169297	ATU031 237	ATL8S2 3743:5 33..1	nap				ATL8S2 3743:1 46..8	0.74	g39942 8	48	93	4.3e- 06	ACRIFL AVIN RESIST ANCE PROTEI N E PRECUR SOR

169298	ATU031 238	ATL8C3 7667:1 084..1	nap					ATL8C3 7667:9 10..26 4	0.73	g36081 47	48	137	5.4e- 12	(AC005 314) putati ve chloro plast 31 kDa ribonu cleopr oteins precu sor [Arabi dopsis thalia na]	(ENVC PROTEI N) [Esche richia colil]
169299	ATU031 239	ATL8C2 3515:1 277..1	nap					ATL8C2 3515:1 260..2 46	0.73	g37860 00, g44551 99	48, 47	331, 347	2.5e- 28, 7.2e- 32	(AC005 499) hypoth etical protei n [Arabi dopsis thalia na]; (AL035 440) putati ve protei n [Arabi dopsis	(ENVC PROTEI N) [Esche richia colil]

169300	ATU031 240	ATL8C9 561:1. .1332	nap				ATL8C9 561:21 .1332	0.72	g21301 39	48	100	2.6e- 09	thalia na] hypoth etical protei n - maize [Zea mays]
169301	ATU031 241	ATL8S2 7876:6 74..1	nap				ATL8S2 7876:5 78..26	0.72	g17883 89	48	339	1.6e- 24	(AE000 297) putati ve membra ne protei n [Esche richia coli]
169302	ATU031 242	ATL8C4 4816:8 43..1	nap				ATL8C4 4816:5 21..59	0.72	g47339 67	48	148	5.8e- 15	(AC007 261) envelo pe- like protie n [Arabi dopsis thalia na]
169303	ATU031 243	ATL8C5 493:81 8..212	nap				ATL8C5 493:64 4..212	0.72	g22451 38	48	408	4.1e- 33	(Z9734 4) hypoth etical protei n [Arabi dopsis thalia

169304	ATU031 244	ATL8S2 0061:5 99..1	nap				ATL8S2 0061:5 25..38	0.72	g11504 21	48	426	1.4e- 43	na] (X8960 2) rTSbet a [Homo sapien s]
169305	ATU031 245	ATL8C4 5445:1 817..3 25	nap				ATL8C4 5445:1 617..3 33	0.71	g28979 46	48	352	1.6e- 32	(AF007 544) prosta te- specif ic membra ne antige n [Homo sapien s]
169306	ATU031 246	ATL8C4 5451:1 ..2064	nap				ATL8C4 5451:1 29..10 15	0.71	g22447 65	48	648	2.7e- 61	(Z9733 5) hypoth etical protei n [Arabi dopsis thalia na]
169307	ATU031 247	ATL8C3 385:25 26..1	nap				ATL8C3 385:23 66..69 5	0.71	g45104 00	48	1520	1.8e- 118	(AC006 587) putati ve vacuol ar- type H(+)- ATPase

169308	ATU031 248	ATL8C4 7913:1 ..1036	nap					ATL8C4 7913:4 08..10 33	0.71	g30254 70	48	363	1.2e- 32	[Arabi dopsis thalia na] (U7675 6) endo- beta- 1,4- glucan ase [Pinus radiat a]
169309	ATU031 249	ATL8C3 6092:1 558..1	nap					ATL8C3 6092:1 558..2 14	0.70	g31579 32	48	823	6.7e- 69	(AC002 131) Simila r to hypoth etical protei n HYP1 gb Z97 338 from A. thalia na. [Arabi dopsis thalia na]
169310	ATU031 250	ATL8C2 7729:1 ..1455	nap					ATL8C2 7729:1 09..12 32	0.70	g38753 81	48	269	(Z4780 8) cDNA EST EMBL:C 10289 comes from	

169311	ATU031 251	ATL8C4 1747:1 ..1493	nap					ATL8C4 1747:5 61..14 93	0.69			g38853 37	48	1041	1.2e- 73	(AC005 623) hypoth etical protei n [Arabi dopsis thalia na]	this gene; cDNA EST EMBL:C 11909 comes from this gene [Caeno rhabdi tis elegan s]
169312	ATU031 252	ATL8C4 4695:1 302..2 41	nap					ATL8C4 4695:1 234..2 41	0.68			g20886 58	48	158	1.9e- 10	(AF002 109) unknow n protei n [Arabi dopsis thalia na]	(AF002 109) unknow n protei n [Arabi dopsis thalia na]
169313	ATU031 253	ATL8C1 881:12 2..140 2	nap					ATL8C1 881:12 2..124 5	0.68			g24997 10	48	1118	3.1e- 111	PHOSPH OLIPAS E D PRECUR SOR	PHOSPH OLIPAS E D PRECUR SOR

169314	ATU031 254	ATL8C4 6982:2 119..1	nap							ATL8C4 6982:2 022..3 62	0.68	g28326 30	48	2463	4.6e- 245	(PLD) (CHOLI NE PHOSPH ATASE) (PHOSP HATIDY LCHOLI NE- HYDROL YZING PHOSPH OLIPAS E D) [Ricin us commun is]
169315	ATU031 255	ATL8S2 9330:1 ..626	nap							ATL8S2 9330:1 26..61 7	0.68	g28296 76	48	389	1.2e- 38	ACYL- COA DEHYDR OGENAS E, LONG- CHAIN SPECIF IC PRECUR SOR (LCAD)

169316	ATU031 256	ATL8C3 1890:1 ..1161	nap				ATL8C3 1890:7 2..113 8	0.67	g10763 65	48	471	4.6e- 52	[Sus scrofa] pectin estera se (EC 3.1.1. 11) PME1 precu sor - Arabid opsis thalia na [Arabi dopsis thalia na]
169317	ATU031 257	ATL8C4 4969:1 064..3 789	nap				ATL8C4 4969:1 197..3 613	0.67	g45443 75	48	1543	8.5e- 153	(AC006 920) putati ve revers e transc riptas e [Arabi dopsis thalia na]
169318	ATU031 258	ATL8C2 5887:1 126..7 72	nap				ATL8C2 5887:1 081..7 72	0.67	g45876 03	48	231	9.1e- 09	(AC006 951) hypoth etical protei n [Arabi dopsis

169319	ATU031 259	ATL8C8 724:13 12..1	nap				ATL8C8 724:12 86..73 3	0.67	g44163 01	48	1570	2.0e- 139	thalia na] (AF105 716) gag protei n [Zea mays]
169320	ATU031 260	ATL8S1 8064:1 ..796	nap				ATL8S1 8064:8 9..248 , ATL8S1 8064:4 21..74 0	0.67, 0.70	g29843 60, g12003 42	48, 43	216, 149	1.1e- 20, 1.4e- 13	(AE000 776) thiami ne biosyn thesis , thiazo le moiety [Aquif ex aeolic us]; (U3388 3) ORF 3 gene produc t [Brady rhizob ium japoni cum]
169321	ATU031 261	ATL8C2 6083:1 ..1780	nap				ATL8C2 6083:1 03..14 93	0.66	g29824 31	48	2259	8.5e- 213	(AI022 224) leucin e rich repeat -like protei

169322	ATU031 262	ATL8C4 8020:1 50..16 79	nap					ATL8C4 8020:1 58..16 46	0.66	g38614 49	48	359	1.0e- 35	(Z9859 6) SMC- family protei n [Schiz osacch aromyc es pombe]
169323	ATU031 263	ATL8C2 9777:5 71..12 6	nap					ATL8C2 9777:3 47..12 6	0.65	g29247 76	48	342	2.5e- 33	(AC002 334) hypoth etical protei n [Arabi dopsis thalia na]
169324	ATU031 264	ATL8C1 2826:1 750..3 07	nap					ATL8C1 2826:1 244..9 35	0.65	g45394 63	48	1340	4.4e- 59	(AL049 500) putati ve protei n [Arabi dopsis thalia na]
169325	ATU031 265	ATL8S3 274:1. .427	nap					ATL8S3 274:68 ..404	0.65	g21274 17	48	294	4.8e- 27	hypoth etical protei n B -

169326	ATU031 266	ATL8C3 9905:3 657..1 123	nap					ATL8C3 9905:3 548..1 770	0.64	g45443 72	48	2116	9.0e- 222	Coryne bacter ium glutam icum [] (AC006 920) putati ve revers e transc riptas e [Arabi dopsis thalia na]
169327	ATU031 267	ATL8C3 6735:7 79..1	nap					ATL8C3 6735:7 79..50 4	0.64	g44328 50	48	1217	4.1e- 129	(AC006 300) hypoth etical protei n [Arabi dopsis thalia na]
169328	ATU031 268	ATL8C4 4851:1 ..1514	nap					ATL8C4 4851:2 3..149 7	0.63	g23426 82	48	747	5.1e- 64	(AC000 106) Contai ns simila rity to Rattus AMP- activa ted

169331	ATU031 271	ATL8C2 4132:1 031..1	nap				ATL8C2 4132:6 67..75	0.61	g22752 01	48	137	2.5e- 18	(AC002 337) unknown protein [Arabi dopsis thaliana]
169332	ATU031 272	ATL8S3 270:51 2..1	nap				ATL8S3 270:51 2..59	0.59	g45143 27	48	134	6.6e- 06	(AB013 368) Ykfb [Bacil lus halodu rans]
169333	ATU031 273	ATL8C3 297:37 55..1	nap				ATL8C3 297:37 55..92 0	0.59	g11675 23, g30470 66	48, 46	745, 464	2.4e- 99, 7.6e- 47	(D8300 3) ORF(AA 1- 1338) [Nicot iana tabacu m]; (AF058 825) contai ns simila rity to retrov irus- relate d POL polypr oteins [Arabi

169336	ATU031 276	ATL8C2 9235:1 ..1497	nap				ATL8C2 9235:1 132..6 46	0.56	g42636 55	48	1513	1.1e- 152	na] (AC006 136) putati ve revers e transc riptas e [Arabi dopsis thalia na]
169337	ATU031 277	ATL8C1 6361:1 745..2 62	nap				ATL8C1 6361:1 687..3 02	0.55	g45672 98	48	1212	3.0e- 103	(AC006 918) putati ve MuDR MURA transp osase [Arabi dopsis thalia na]
169338	ATU031 278	ATL8S2 4548:4 57..1	nap				ATL8S2 4548:3 50..21	0.55	g30804 02	48	278	4.4e- 25	(AL022 603) putati ve NADPH quinon e oxidor educta se [Arabi dopsis thalia na]

169339	ATU031 279	ATL8C3 2537:2 82..24 64	nap			ATL8C3 2537:3 17..24 16	0.55	g45860 28	48	1764	1.3e- 111	(AC007 109) putati ve retrot ranspo son associ ated protei n [Arabi dopsis thalia na]
169340	ATU031 280	ATL8C4 9329:1 060..1	nap			ATL8C4 9329:1 060..1 02	0.54	g34137 01	48	826	6.6e- 87	(AC004 747) hypoth etical protei n [Arabi dopsis thalia na]
169341	ATU031 281	ATL8C1 9242:1 528..1	nap			ATL8C1 9242:1 527..3 94	0.54	g42181 17	48	1797	4.8e- 142	(AL035 353) putati ve protei n (fragm ent) [Arabi dopsis thalia na]
169342	ATU031 282	ATL8C1 7029:1 ..1051	nap			ATL8C1 7029:4 9..105	0.52	g28326 78	48	335	2.7e- 32	(AL021 712) putati

									1								ve protei n [Arabi dopsis thalia na]
169343	ATU031 283	ATL8C3 814:90 0..338	nap						ATL8C3 814:86 8..339	0.52	g49144 01	48	171	1.4e- 13	(AL050 352) hypoeth etical protei n [Arabi dopsis thalia na]		
169344	ATU031 284	ATL8C3 5099:1 ..1195	nap						ATL8C3 5099:5 30..96 0	0.52	g22528 51	48	328	1.7e- 39	(AF013 294) No defini tion line found [Arabi dopsis thalia na]		
169345	ATU031 285	ATL8C1 31:187 4..1	nap						ATL8C1 31:158 3..27	0.52	g99721	48	2374		retrov irus- relate d polypr oteins - Arabid opsis thalia na retrot		

169346	ATU031 286	ATL8C2 9415:1 ..931	nap					ATL8C2 9415:6 2..931	0.51	g41548 10	48	194	2.8e- 20	(AE001 465) DIAMIN OPIMEL ATE DECARB OXYLAS E [Helic obacte r pylori J99]	ranspo son Tal-3 [Arabi dopsis thalia na]
169347	ATU031 287	ATL8S3 0273:6 0..415	nap					ATL8S3 0273:2 62..33 9	0.49	g11752 38	48	261	4.1e- 23	HYPOTH ETICAL PROTEI N HI0392 [Haemo philus influe nzae Rd]	
169348	ATU031 288	ATL8S3 0831:1 1..502	nap					ATL8S3 0831:7 8..411	0.48	g44173 07	48	458	1.3e- 38	(AC006 446) putati ve pol polypr otein [Arabi dopsis thalia na]	

169349	ATU031 289	ATL8C6 64:1.. 3257	nap				ATL8C6 64:892 ..2111	0.48	g45443 72	48	1521	1.5e- 156	(AC006 920) putati ve revers e transc riptas e [Arabi dopsis thalia na]
169350	ATU031 290	ATL8C2 1846:2 245..1	nap				ATL8C2 1846:2 171..1 9	0.48	g46801 83	48	532	2.3e- 50	(AF111 709) gag- pol protei n [Oryza sativa subsp. indica]
169351	ATU031 291	ATL8C1 9897:7 49..1	nap				ATL8C1 9897:7 33..22 2	0.45	g49143 88	48	514	2.2e- 57	(AC007 167) putati ve root iron transp orter protei n [Arabi dopsis thalia na]
169352	ATU031 292	ATL8S3 0142:2	nap				ATL8S3 0142:2	0.44	g44172 84	48	527	9.6e- 54	(AC007 019)

169353	ATU031 293	36..62	nap						60..55 1	0.44	945824 35	48	577	5.0e- 54	hypothetical protein [Arabidopsis thaliana]
		ATL8C4 5488:909..1							ATL8C4 5488:815..22						(AC007196) putative selenin binding protein [Arabidopsis thaliana]
169354	ATU031 294	ATL8S5 875:500..1	nap						ATL8S5 875:459..33	0.43	958531 4	48	385	1.2e- 33	KETOL-ACID REDUCTOISOME RASE (ACETO HYDROXY-ACID ISOMEROREDUCTASE) (ALPHA-KETO-BETA-HYDROXYLACYL REDUCTOISOME

169355	ATU031 295	ATL8C2 1797:1 ..1075	nap						ATL8C2 1797:2 39..10 22	0.41	g32490 76	48	860	6.5e- 93	(AC004 473) Simila r to beta glucos idase (bg1A) gb1X94 986 from Maniho t escule nta. [Arabi dopsis thalia na]	(BASE) [Bacil lus subtil is]
169356	ATU031 296	ATL8C1 6286:1 37..21 57	nap						ATL8C1 6286:1 37..17 46	0.41	g44553 11, g41153 76	48, 37	1112, 406	2.0e- 108, 2.2e- 33	(AL035 528) putati ve diseas e resist ance protei n [Arabi dopsis thalia na]; (AC005 967)	

169357	ATU031 297	ATL8C2 5137:1 680..1 256	nap						0.41	g36680 79	48	598	4.1e- 28	(AC004 667) hypoth etical protei n [Arabi dopsis thalia na]
169358	ATU031 298	ATL8S3 1004:2 82..52 3	nap						0.40	g45859 30	48	289	6.6e- 28	(AC007 211) hypoth etical protei n [Arabi dopsis thalia na]
169359	ATU031 299	ATL8S2 2993:1 ..530	nap							g30804 45	48	875	1.5e- 85	(AL022 605) putati ve protei n [Arabi dopsis thalia na]
169360	ATU031 300	ATL8C1 5524:7	nap							g45389 57	48	66	6.1e- 07	(AL049 488)

169361	ATU031 301	ATL8C4 2096:7 10..1	nap										g10766 68	48	980	8.9e- 81	NADH dehydr ogenas e (EC 1.6.99 .3) - potato [Solan um tubero sum]	putati ve protei n [Arabi dopsis thalia na]
169362	ATU031 302	ATL8C5 311:1. .197	nap										g43887 25	48	196	2.2e- 18	(AC006 413) putati ve S1 self- incomp atibil ity protei n [Arabi dopsis thalia na]	putati ve protei n [Arabi dopsis thalia na]
169363	ATU031 303	ATL8C1 1881:1 021..1	nap										g41274 61	48	604	6.8e- 51	(AJ011 674) recept or- like protei n	putati ve protei n [Arabi dopsis thalia na]

169364	ATU031 304	ATL8C5 418:25 2..434	nap									g19463 74	48	130	2.3e- 06	kinase , RLK3 [Arabi dopsis thalia na]
																(U9321 5) myb- like protei n isolog [Arabi dopsis thalia na]
169365	ATU031 305	ATL8C3 7166:1 ..1963	nap									g45672 77	48	1759		(AC006 841) putati ve pol protei n with Zn finger CCHC type domain [Arabi dopsis thalia na]
169366	ATU031 306	ATL8C1 2271:6 56..12 06	nap									g45394 30	48	333	8.6e- 33	(AL049 171) putati ve protei n [Arabi dopsis

169367	ATU031 307	ATL8C4 192:1. .759	nap										g43357 37	48	367	2.6e- 34	thalia na] (AC006 248) putati ve serine /threo nine kinase [Arabi dopsis thalia na]
169368	ATU031 308	ATL8C4 8837:1 906..1	nap										g37460 69	48	2070	2.9e- 204	(AC005 311) putati ve revers e transc riptas e [Arabi dopsis thalia na]
169369	ATU031 309	ATL8C9 346:22 87..15 20	nap										g10762 91	48	1181	2.5e- 115	amino acid transp orter AAT1 - Arabid opsis thalia na [Arabi dopsis thalia na]

169379	318	0456:4 09..1	nap															10	4) NADH dehydr ogenas e 27kD subuni t [Nicot iana tabacu m]
	ATU031 319	ATL8C4 2765:3 99..88 9	nap						ATL8C4 2765:3 99..77 4		1.00	g45393 85	47	653				1.6e- 65	(AL035 526) putati ve protei n [Arabi dopsis thalia na]
169380	ATU031 320	ATL8C1 4491:2 518..1 858	nap									g22448 84	48	873				3.8e- 89	(Z9733 8) glucos yltran sferas e [Arabi dopsis thalia na]
169381	ATU031 321	ATL8C2 597:18 71..55 3	nap									g45811 64	48	1385				8.1e- 137	(AC006 220) putati ve polypr otein [Arabi dopsis thalia]

169386	ATU031 326	ATL8C4 540:31 21..34 59	nap										g36081 46	48	279	6.0e- 18	prote n [Arabi dopsis thalia nal] (AC005 314) unknow n protei n [Arabi dopsis thalia nal]
169387	ATU031 327	ATL8S2 6323:4 9..560	nap										g17997 24	48	592		(D9086 4) CHORIS MATE SYNTHA SE (EC 4.6.1. 4) (5- 4) ENOLPY RUVYLS HIKIMA TE-3- PHOSPH ATE PHOSPH OLYASE) [Esche richia coli]
169388	ATU031 328	ATL8C4 5389:6 1..671	nap										g17102 96	48	363	8.5e- 37	RIBOFL AVIN- SPECIF IC

169389	ATU031 329	ATL8C4 4686:6 018..5 610	nap										g48952 24	48	327	3.0e- 23	DEAMIN ASE [Actin obacil lus pleuro pneumo niae] (AC007 660) putati ve revers e transc riptas e [Arabi dopsis thalia na]
169390	ATU031 330	ATL8C3 3383:1 ..768	nap										g43253 48	48	893	5.5e- 75	(AF128 394) contai ns simila rity to phosph ate transp orters [Arabi dopsis thalia na]
169391	ATU031 331	ATL8C2 3905:1 530..7 99	nap										g28646 26	48	815	4.5e- 75	(AL021 811) cytoch rome

169392	ATU031 332	ATL8C4 412:11 78..28 7	nap							g34260 39	48	601	5.4e- 66	p450-like protein [Arabis dopsis thaliana]
169393	ATU031 333	ATL8C2 1131:3 84..1	nap							g45389 35	48	132	2.3e- 08	(AL049 483) putative protein [Arabis dopsis thaliana]
169394	ATU031 334	ATL8C7 346:1. .957	nap							g46461 99	48	932	1.0e- 92	(AC007 230) EST gb T22 166 comes from this gene. [Arabis dopsis thaliana]

169395	ATU031 335	ATL8C4 4143:8 64..55 1	nap									g10016 03	48	130	1.1e- 06	na] (D6400 0) hypoth etical protei n [Synec hocyst is sp.]
169396	ATU031 336	ATL8S1 3410:7 49..1	nap									g21139 12, g21139 11	48, 36	74, 512	1.6e- 06, 4.4e- 34	(Z9555 4) hypoth etical protei n Rv1628 C [Mycob acteri um tuberc ulosis]; (Z9555 4) hypoth etical protei n Rv1627 C [Mycob acteri um tuberc ulosis]
169397	ATU031	ATL8C1	nap									g43097	48	1160		(AC006

169398	ATU031 338	0139:7 94..1	nap							56	48	477	6.7e- 37	217) putati ve transp osase [Arabi dopsis thalia na]
		ATL8S7 883:65 7..159	nap							g44163 03				(AF105 716) gag protei n [Zea mays]
169399	ATU031 339	ATL8C3 1914:1 01..79 1	nap							g42043 10	48	807	1.2e- 51	(AC003 027) lcl pr t_seq No defini tion line found [Arabi dopsis thalia na]
169400	ATU031 340	ATL8C3 7861:1 ..916	nap							g37023 42	48	1330	1.7e- 129	(AC005 397) hypoth etical protei n [Arabi dopsis thalia na]
169401	ATU031	ATL8S1	nap							g15316	47	546	1.4e-	(U5332

	341	5146:1 ..557						5146:1 1..463	17			47	7) NodE [Rhizo bium sp.]
169402	ATU031 342	ATL8C3 692:20 47..26 20	nap						g45858 84	48	307	5.9e- 27	(AC005 850) Hypoth etical protei n [Arabi dopsis thalia na]
169403	ATU031 343	ATL8C2 2409:1 ..864	nap						g45672 96	48	230	5.6e- 22	(AC006 918) putati ve Athila retro element ORF1 protei n [Arabi dopsis thalia na]
169404	ATU031 344	ATL8C8 168:1. .1697	nap						g24629 35	48	1426	1.3e- 153	(Y1232 1) open readin g frame 1 [Brass ica olerac ea]

169405	ATU031 345	ATL8S1 349:64 ..536	nap							g28270 82	48	676	2.1e- 67	(AF020 272) malate dehydr ogenase [Medic ago sativa]
169406	ATU031 346	ATL8S1 3494:1 ..476	nap							g11761 83	48	441	6.1e- 43	HYPOTH ETICAL 37.1 KD PROTEI N IN SOHA- MTR INTERG ENIC REGION (O335) [Esche richia coli]
169407	ATU031 347	ATL8C3 1431:2 135..1 671	nap							g41159 16	48	586	2.2e- 45	(AF118 222) F3H7.9 gene produc t [Arabi dopsis thalia na]
169408	ATU031 348	ATL8S2 3665:5 61..95	nap							g22664 26	48	232	4.2e- 23	(Y1391 7) yngG [Bacil lus]

																	NE DIPHOS PHOGLU COSE PYROPH OSPHOR YLASE) [Pseud omonas aerugi nosaj (AC006 585) hypoth etical protei n [Arabi dopsis thalia naja (Z8112 4) predic ted using Genefi nder; simila r to collag en [Caeno rhabdi tis elegan s] (AC005 990) Simila
169411	ATU031 351	ATL8C3 8629:3 165..2 845	nap									g45593 55	48	151	1.6e- 12		
169412	ATU031 352	ATL8S9 404:49 1..1	nap						ATL8S9 404:43 6..30	1.00	g38799 52	47	74	0.073			
169413	ATU031 353	ATL8C9 670:1. .451	nap								g40564 40	48	693	1.7e- 66			

169414	ATU031 354	ATL8C4 5582:1 ..636	nap										g34137 10	48	427	5.4e- 44	r to OBP32p ep protei n gb U37 698 from Arabid opsis thalia na. [Arabi dopsis thalia na]
169415	ATU031 355	ATL8C5 921:1. .764	nap										g28014 44	48	199		(AC004 747) hypoth etical protei n [Arabi dopsis thalia na]
169416	ATU031 356	ATL8C1 8576:2	nap										g33193 72	48	2210	5.0e- 231	(AF028 339) ubiqui tin- conjug ating enzyme 16 [Arabi dopsis thalia na]
																	(AF077 409)

169419	ATU031 359	ATL8C4 7643:1 281..6 1	nap										g49143 81	48	834	2.3e- 89	[Arabi dopsis thalia na] (AC007 584) unknow n protei n [Arabi dopsis thalia na]
169420	ATU031 360	ATL8S1 3539:1 ..558	nap										g35823 23	48	378	4.0e- 39	(AC005 496) hypoth etical protei n [Arabi dopsis thalia na]
169421	ATU031 361	ATL8S6 852:52 4..1	nap										g13635 28	48	520		gag protei n - maize [Zea mays]
169422	ATU031 362	ATL8S1 9255:1 ..380	nap										g11084 9	48	99	0.019	prolin e-rich protei n - mouse [Mus muscul us]
169423	ATU031 363	ATL8S7 163:1.	nap										g22136 32	48	618	1.2e- 62	(AC000 103)

169428	ATU031 368	..1062											nap	ATL8C4 5538:8 70..1	ATL8S2 9868:4 55..1	ATU031 369	169429
169430	ATU031 370	ATL8S1 6750:5 47..1								ATL8S1 6750:4 32..59	1.00		nap	ATL8S1 6750:5 47..1	ATL8S2 5979:2 17..46 9	ATU031 371	169431

169432	ATU031 372	ATL8C2 7722:6 14..1	nap					ATL8C2 7722:6 14..51	0.98	g45875 40	47	762		protein [Arabi dopsis thalia nal]
169433	ATU031 373	ATL8C1 8824:6 57..1	nap					ATL8C1 8824:6 11..11 9	0.98	g23427 29	47	601	1.6e- 55	(AC002 341) hypoth etical protei n [Arabi dopsis thalia nal]
169434	ATU031 374	ATL8C1 3883:2 478..1	nap					ATL8C1 3883:2 335..9 3	0.97	g46801 83	47	626	3.8e- 60	(AF111 709) gag- pol

169435	ATU031 375	ATL8S8 335:1. .515	nap					ATL8S8 335:31 1..406	0.96	g18086 94	47	58	3.2e- 05	(Y1078 7) hypoth etical protei n [Sporo bolus stapfi anus]	protei n [Oryza sativa subsp. indica]
169436	ATU031 376	ATL8C2 0264:1 ..1194	nap					ATL8C2 0264:4 1..977	0.96	g10793 21	47	251	4.8e- 14	XPMC2 protei n - Africa n clawed frog [Xenop us laevis]	n - Africa n clawed frog [Xenop us laevis]
169437	ATU031 377	ATL8C1 6016:1 ..1984	nap					ATL8C1 6016:5 54..16 10	0.95	g45845 36, g29824 41	47, 31	559, 435	2.6e- 60, 8.8e- 37	(AL049 608) cytoch rome p450 like protei n [Arabi dopsis thalia nal];	(AL049 608) cytoch rome p450 like protei n [Arabi dopsis thalia nal];

169438	ATU031 378	ATL8C2 3087:4 56..1	nap						ATL8C2 3087:4 56..28	0.95	g17229 18	47	277	1.5e- 23	(AL022 224) cytoch rome p450 like protei n [Arabi dopsis thalia na]
169439	ATU031 379	ATL8C3 1804:1 ..553	nap						ATL8C3 1804:1 88..55 3	0.95	g42622 13	47	644	2.5e- 55	(AC006 161) hypoth etical protei n [Arabi dopsis thalia na]
169440	ATU031 380	ATL8C2 7500:1 ..970	nap						ATL8C2 7500:2 27..81 0	0.95	g48952 23	47	751		(AC007 660) hypoth etical

169444	ATU031 384	ATL8S1 5815:8 1..603	nap				ATL8S1 5815:8 1..173	0.93	g28328 00	47	262	2.5e- 23	(AJ223 978) putati ve ABC transp orter, YvrO [Bacil lus subtil is]
169445	ATU031 385	ATL8C7 328:1. .707	nap				ATL8C7 328:51 ..229	0.93	g38343 23	47	687	5.5e- 41	(AC005 679) F9K20. 25 [Arabi dopsis thalia na]
169446	ATU031 386	ATL8C6 516:32 36..1	nap				ATL8C6 516:28 13..21	0.93	g44553 38	47	571	1.6e- 45	(AL035 525) putati ve protei n [Arabi dopsis thalia na]
169447	ATU031 387	ATL8C1 170:11 55..30 9	nap				ATL8C1 170:10 91..31 8	0.92	g49268 66	47	1016	5.7e- 95	(AC007 509) putati ve amp- bindin g protei n [Arabi dopsis

169448	ATU031 388	ATL8S1 9265:6 15..1	nap				ATL8S1 9265:5 36..96	0.92	g45018 59	47	599	1.2e- 57	thalia nal acyl- Coenzy me A dehydr ogenas e, short/ branch ed chain precu sor [Homo sapien s]
169449	ATU031 389	ATL8S2 4192:4 91..1	nap				ATL8S2 4192:4 63..23 9	0.91	g39155 72	47	291	3.1e- 22	HYPOTH ETICAL 36.8 KD PROTEI N IN THE TAR-I TTUE- TTUC' INTERG ENIC REGION PRECUR SOR (ORFY) [Agrob acteri um vitis]
169450	ATU031 390	ATL8C5 237:71 4..1	nap				ATL8C5 237:71 4..8	0.91	g11754 70	47	72	0.0002 0	HYPOTH ETICAL 37.3

169454	ATU031 394	ATL8S1 1584:5 45..13 5	nap					05	ATL8S1 1584:5 00..16 7	0.90	g26496 90	47	180	0.23	(AE001 041) dihydr odipic olinat e syntha se (dapA) [Archa eoglob us fulgid us]	ve ribonu cleopr oteins [Arabi dopsis thalia na]
169455	ATU031 395	ATL8C1 6708:1 968..1	nap						ATL8C1 6708:1 609..1 2	0.90	g48952 42	47	322	4.0e- 07	(AC007 659) putati ve transc riptio n factor [Arabi dopsis thalia na]	(Z9520 7) nicT [Mycob acteri um]
169456	ATU031 396	ATL8S2 2452:1 ..519	nap						ATL8S2 2452:7 5..479	0.89	g20780 03	47	411	2.0e- 34	(Z9520 7) nicT [Mycob acteri um]	(Z9520 7) nicT [Mycob acteri um]

169457	ATU031 397	ATL8C7 504:72 6..202	nap					ATL8C7 504:58 8..205	0.89	g37860 08	47	100	7.5e- 11	(AC005 499) unknown protein [Arabi dopsis thalia na]	tuberc ulosis]
169458	ATU031 398	ATL8C2 1167:1 044..1	nap					ATL8C2 1167:9 70..38	0.88	g16695 99	47	326	4.4e- 33	(D8874 6) AR791 [Arabi dopsis thalia na]	
169459	ATU031 399	ATL8C2 6070:1 ..2100	nap					ATL8C2 6070:7 69..17 46	0.88	g44068 21	47	678	4.5e- 68	(AC006 201) hypoth etical protein [Arabi dopsis thalia na]	
169460	ATU031 400	ATL8C3 0466:1 657..1 89	nap					ATL8C3 0466:1 607..2 57	0.87	g30212 81	47	1389	1.3e- 144	(AL022 347) serine /threo nine kinase - like protein [Arabi	

169461	ATU031 401	ATL8S2 3294:1 ..475	nap					ATL8S2 3294:5 4..475	0.87	g26358 23	47	93	0.998	(Z9912 0) similar to hypoth etical protei ns [Bacil lus subtil is]
169462	ATU031 402	ATL8C5 0233:1 485..1	nap					ATL8C5 0233:1 313..7 9	0.87	g43888 34	47	1153	7.8e- 124	(AC006 528) putati ve diseas e resist ance protei n RPP1, 3', partia l [Arabi dopsis thalia nal]
169463	ATU031 403	ATL8C1 3035:1 ..1110	nap					ATL8C1 3035:1 37..11 10	0.86	g21911 48	47	287	8.8e- 28	(AF007 269) A IG00 2N01.2 8 gene produc t

169464	ATU031 404	ATL8C2 8119:7 50..1	nap					ATL8C2 8119:7 50..11 3	0.85	g49144 02	47	157	1.3e- 20	[Arabi dopsis thalia na] (AL050 352) hypoth etical protei n [Arabi dopsis thalia na]
169465	ATU031 405	ATL8C3 697:78 6..299 7	nap					ATL8C3 697:78 6..297 1	0.85	g45585 52	47	2444	1.1e- 215	(AC007 138) putati ve P- glycop rotein -like protei n [Arabi dopsis thalia na]
169466	ATU031 406	ATL8S9 508:1. .549	nap					ATL8S9 508:31 3..532	0.85	g25066 52	47	205	2.0e- 13	HYPOTH ETICAL 44.5 KD PROTEI N IN PGPB- PYRF INTERG ENIC REGION PRECUR SOR

169467	ATU031 407	ATL8C1 4918:7 36..39 7	nap					ATL8C1 4918:5 62..39 7	0.82	g31842 84	47	144	6.6e- 14	[Esche richia colli] (AC004 136) hypoth etical protei n [Arabi dopsis thalia na]
169468	ATU031 408	ATL8C4 4350:1 235..2 14	nap					ATL8C4 4350:1 200..2 14	0.82	g24438 79	47	718	9.5e- 80	(AC002 294) simila r to jasmon ate induce d protei n gp Y11 483 18 83006 [Arabi dopsis thalia na]
169469	ATU031 409	ATL8S1 0834:3 74..58	nap					ATL8S1 0834:3 24..58	0.80	g26873 40	47	177	3.4e- 15	(AL020 958) glutam ate permea se [Strep tomyce s coelic

169470	ATU031 410	ATL8C1 2108:1 002..1	nap				ATL8C1 2108:9 78..25 7	0.80		g48951 94	47	425	2.8e- 30	olor] (AC007 661) putati ve peptid e transp orter protei n [Arabi dopsis thalia na]
169471	ATU031 411	ATL8S2 183:49 3..1	nap				ATL8S2 183:46 2..12	0.80		g47739 03	47	323	2.4e- 25	(AF074 021) putati ve transp oson protei n [Arabi dopsis thalia na]
169472	ATU031 412	ATL8C1 0341:1 334..1	nap				ATL8C1 0341:1 334..3 16	0.78		g25650 07	47	1934		(AC002 983) predic ted transp oson protei n [Arabi dopsis thalia na]
169473	ATU031	ATL8C1	nap				ATL8C1	0.78		g33675	47	1523	1.6e-	(AC004

169474	413	8571:7 3..122 9					8571:7 3..981	32				153	392) Strong simila rity to unknow n protei n T28M21 .21 [Arabi dopsis thalia nal]
169475	ATU031 414	ATL8C4 1137:3 49..1	nap				ATL8C4 1137:1 91..61	0.78	g33778 35	47	196	3.5e- 20	(AF075 598) contai ns simila rity to Arabid opsis thalia na downy mildew resist ance protei n RPP5 (GB:U9 7106) [Arabi dopsis thalia nal]
169475	ATU031 415	ATL8C9 765:1.	nap				ATL8C9 765:72	0.77	g37790 21	47	1812	2.6e- 180	(AC005 171)

169476	ATU031 416	ATL8C3 533:1. .1074	nap					8..187 9	0.77	g29824 38	47	653	2.3e- 61	(AL022 224) cadine ne syntha se like protei n [Arabi dopsis thalia na]
169477	ATU031 417	ATL8C3 9446:4 32..11 48	nap					ATL8C3 9446:4 56..95 6	0.77	g10766 11	47	345	5.0e- 28	peroxi dase (EC 1.11.1 .7), anioni c, precur sor - wood tobacc o []
169478	ATU031 418	ATL8C3 0642:1 05..62 1	nap					ATL8C3 0642:1 05..48 9	0.77	g26186 94	47	736	6.3e- 71	(AC002 510) putati ve

169479	ATU031 419	ATL8S1 8813:1 ..583	nap						ATL8S1 8813:1 2..554	0.76	g11718 87	47	676	1.6e- 65	zinc- finger protein [Arabi dopsis thaliana]
169480	ATU031 420	ATL8S2 8740:5 87..1	nap						ATL8S2 8740:5 23..10	0.75	g14774 86	47	678	6.0e- 58	(U4482 8) transp osase [Burkh olderi a cepaci a]
169481	ATU031	ATL8C2	nap						ATL8C2	0.75	g26540	47	76	0.9996	(AF032

421	9722:5 438..2 22					9722:5 438..2 22	75					673) Notch homolo g [Lucil ia cuprin a]
169482	ATU031 422	ATL8S2 4234:5 89..1	nap			ATL8S2 4234:4 50..52	0.75	g48367 71	47	345	6.2e- 27	(AF136 579) iron- regula ted transp orter 1 [Lycop ersico n escule ntum]
169483	ATU031 423	ATL8C1 2062:1 903..5 195	nap			ATL8C1 2062:1 912..4 915	0.74	g44671 26	47	1675	3.1e- 149	(AL035 538) guanin e nucleo tide- exchan ge protei n-like [Arabi dopsis thalia na]
169484	ATU031 424	ATL8C4 0884:1 272...3 47	nap			ATL8C4 0884:1 059...3 47	0.73	g45393 20	47	1005	3.4e- 98	(AL035 679) putati ve endo-

169485	ATU031 425	ATL8S8 046:54 5..1	nap						ATL8S8 046:50 2..434	0.72	g29245 22	47	869	5.3e- 85	(AL022 023) putati ve protei n [Arabi dopsis thalia na]
169486	ATU031 426	ATL8S2 2152:1 ..410	nap						ATL8S2 2152:3 5..335	0.72	g44909 86	47	270	3.4e- 22	(AL035 707) hypo thetical protei n [Strept omyces coelic olor]
169487	ATU031 427	ATL8C2 0215:1 ..1322	nap						ATL8C2 0215:1 04..12 37	0.71	g40080 10	47	746	4.6e- 77	(AF084 036) recept or- like protei n kinase [Arabi dopsis thalia]

169488	ATU031 428	ATL8C4 3022:1 612..5 07	nap				ATL8C4 3022:1 568..5 07	0.71	g32427 13	47	1832	3.3e- 190	(AC003 040) putati ve transp osase [Arabi dopsis thalia na]
169489	ATU031 429	ATL8C4 8861:1 088..1	nap				ATL8C4 8861:1 088..1 92	0.71	g28276 63	47	281	5.1e- 30	(AL021 637) membra ne- associ ated salt- induci ble- like protei n [Arabi dopsis thalia na]
169490	ATU031 430	ATL8C4 1004:1 ..922	nap				ATL8C4 1004:7 0..768	0.70	g45809 90	47	478	7.2e- 38	(AF120 335) putati ve transp osase [Arabi dopsis thalia na]
169491	ATU031 431	ATL8C1 9722:1 ..809	nap				ATL8C1 9722:2 98..69	0.70	g26513 05	47	247	1.9e- 30	(AC002 336) hypoth

169492	ATU031 432	ATL8S1 9933:1 ..487	nap						9	ATL8S1 9933:7 9..254 , ATL8S1 9933:4 43..33 4	0.69, 0.91	g28208 6	47	591	4.4e- 59	etical protei n [Arabi dopsis thalia na]
169493	ATU031 433	ATL8C4 2978:1 ..832	nap							ATL8C4 2978:2 66..77 0	0.69	g48503 96	47	407	3.3e- 40	(AC007 357) F3F19. 15 [Arabi dopsis thalia na]
169494	ATU031 434	ATL8C8 42:278 6..1	nap							ATL8C8 42:278 6..98	0.68	g45811 39	47	2914	3.4e- 299	(AC006 919) putati ve ABC transp orter [Arabi dopsis thalia na]

169495	ATU031 435	ATL8C1 6877:1 73..55 3	nap				ATL8C1 6877:1 94..49 3	0.68	g11752 42	47	193	3.5e- 08	na] PHOSPH OMETHY LPYRIM IDINE KINASE (HMP- PHOSPH ATE KINASE) (HMP-P KINASE) [Haemo philus influe nzae Rd]
169496	ATU031 436	ATL8C3 6730:1 ..800	nap				ATL8C3 6730:5 52..48 5	0.67	g49143 36	47	432	1.1e- 36	(AC005 489) F14N23 .22 [Arabi dopsis thalia na]
169497	ATU031 437	ATL8C4 3221:3 50..1	nap				ATL8C4 3221:2 46..84	0.66	g54193 5	47	259	8.0e- 27	4- coumar ate-- CoA ligase (EC 6.2.1. 12) (clone GM4CL1 3) - soybea n

169498	ATU031 438	ATL8C3 8477:1 ..660	nap					ATL8C3 8477:2 99..64 7	0.66	g43144 00	47	369	1.2e- 30	(AC006 232) putati ve seleni um- bindin g protei n [Arabi dopsis thalia na]
169499	ATU031 439	ATL8S3 0184:3 56..6	nap					ATL8S3 0184:3 43..6	0.65	g44552 98	47	395	3.0e- 40	(AL035 528) hypoth etical protei n [Arabi dopsis thalia na]
169500	ATU031 440	ATL8C9 25:262 9..1	nap					ATL8C9 25:250 6..136	0.65	g33675 19	47	2492	1.5e- 159	(AC004 392) Contai ns simila rity to gb U51 898 Ca2+- indepe ndent phosph

169501	ATU031 441	ATL8S1 8732:8 01..1	nap						ATL8S1 8732:6 37..24 1	0.64	g37460 63	47	862	8.0e- 80	(AC005 311) unknown protein [Arabi dopsis thalia na]	olipas e A2 from Rattus norveg icus. [Arabi dopsis thalia na]
169502	ATU031 442	ATL8C2 1190:1 401..1	nap						ATL8C2 1190:1 401..7 40	0.64	g45843 54	47	778	2.2e- 18	(AC006 420) putati ve PttA- like transp oson protei n [Arabi dopsis thalia na]	olipas e A2 from Rattus norveg icus. [Arabi dopsis thalia na]
169503	ATU031 443	ATL8C3 1706:1 748..1	nap						ATL8C3 1706:1 694..8	0.64	g31766 59	47	948	8.7e- 88	(AC004 393) Strong simila rity to	olipas e A2 from Rattus norveg icus. [Arabi dopsis thalia na]

169504	ATU031 444	ATL8C3 9925:7 36..1	nap						0.63	g29110 79	47	267	3.1e- 14	(AL021 960) putati ve protei n [Arabi dopsis thalia na]	recept or kinase gb M80 238 from A. thalia na. [Arabi dopsis thalia na]
169505	ATU031 445	ATL8S1 5303:4 02..1	nap						0.63	g17423 82	47	208	7.9e- 18	(D9078 6) N- hydrox yaryla mine O- acetyl transf erase (EC 2.3.1. 118) (Arylh ydroxa mate N,O- acetyl	

169506	ATU031 446	ATL8C4 785:74 0..213 1	nap					ATL8C4 785:20 75..75 2	0.63	g34137 01	47	534	1.9e- 49	transf erases (Aryla mine N- acetyl transf erases) [Esche richia coli]
169507	ATU031 447	ATL8C1 8777:5 68..16 1	nap					ATL8C1 8777:4 87..16 1	0.62	g14813 8	47	400	5.2e- 37	(J0159 4) ATP syntha se gamma subuni t (atp- 7) [Esche richia coli]
169508	ATU031 448	ATL8C2 5327:5 49..20 59	nap					ATL8C2 5327:6 81..20 01	0.62	g36458 99	47	2484	8.8e- 232	(U6840 8) 5' end not determ ined

169509	ATU031 449	ATL8C4 2958:9 10..22 0	nap					ATL8C4 2958:8 15..23 2	0.62	g48352 24	47	780	5.0e- 73	(AL049 862) protei n kinase ATN1 like protei n [Arabi dopsis thalia na]
169510	ATU031 450	ATL8C1 0337:2 00..34 50	nap					ATL8C1 0337:2 00..18 38, ATL8C1 0337:2 554..3 450	0.62, 0.79	g45443 72	47	1971		(AC006 920) putati ve revers e transc riptase [Arabi dopsis thalia na]
169511	ATU031 451	ATL8C9 471:20 8..145 6	nap					ATL8C9 471:21 6..107 5	0.61	g45861 04	47	838	1.2e- 83	(AL049 638) putati ve protei n [Arabi dopsis thalia na]

169512	ATU031 452	ATL8S2 4119:1 ..592	nap				ATL8S2 4119:4 9..542	0.61	g25072 95	47	483	1.0e- 42	na]
													HYPOTH ETICAL ADENIN E- SPECIF IC METHYL ASE IN AROC- FADL INTERG ENIC REGION [Esche richia coli]
169513	ATU031 453	ATL8C4 4248:3 73..18 90	nap				ATL8C4 4248:3 73..18 90	0.61	g39143 59	47	1270	3.1e- 135	PHOSPH OLIPAS E D PRECUR SOR (PLD) (CHOLI NE PHOSPH ATASE) (PHOSP HATIDY LCHOLI NE- HYDROL YZING PHOSPH OLIPAS E D) [Vigna unguic ulata]
169514	ATU031	ATL8C2	nap				ATL8C2	0.60	g45586	47	1324		(AC007

169516	ATU031 456	ATL8C2 8980:1 ..779	nap					ATL8C2 8980:2 67..77 9	0.60	g46783 05	47	72	0.051	dopsis thalia na] (AL049 655) putati ve protei n [Arabi dopsis thalia na]
169517	ATU031 457	ATL8C4 2280:1 ..1736	nap					ATL8C4 2280:1 561..1 399	0.59	g37460 69	47	1989	1.4e- 166	AC005 311) putati ve revers e transc riptas e [Arabi dopsis thalia na]
169518	ATU031 458	ATL8C1 2159:1 427..5 37	nap					ATL8C1 2159:1 422..5 37	0.59	g21045 29	47	914	1.9e- 84	(AF001 308) putati ve hexose transp orter [Arabi dopsis thalia na]
169519	ATU031 459	ATL8C4 5549:5 43..1	nap					ATL8C4 5549:2 42..15	0.59	g22463 80	47	111	5.2e- 12	(Z8609 5) peptid

169523	ATU031 463	ATL8S1 4880:4 57..1	nap				ATL8S1 4880:4 57..7	0.57	g16175 15	47	160	1.0e- 15	(U6599 4) pilin gene invert ing protei n homolo g PivNG [Neiss eria gonorr hoeae]
169524	ATU031 464	ATL8C1 2795:4 7..144 6	nap				ATL8C1 2795:8 5..142 0	0.57	g45812 07	47	1324	1.2e- 109	(Y1791 4) cyclic nucleo tide and calmod ulin- regula ted ion channe l [Arabi dopsis thalia na]
169525	ATU031 465	ATL8C4 0225:8 92..1	nap				ATL8C4 0225:6 49..39 7	0.57	g42622 13	47	231	1.3e- 22	(AC006 161) hypoth etical protei n

169526	ATU031 466	ATL8S1 5615:1 ..534	nap					ATL8S1 5615:9 8..457	0.56	g39475 50	47	238	4.6e- 22	[Z8154 5) F49H6. 5 [Caeno rhabdi tis elegan s]	[Arabi dopsis thalia na]
169527	ATU031 467	ATL8C4 678:1. .1553	nap					ATL8C4 678:58 ..1264	0.56	g33778 10	47	397	1.3e- 27	(AF076 275) contai ns simila rity to glutar edoxin s [Arabi dopsis thalia na]	
169528	ATU031 468	ATL8S1 1061:6 32...1	nap					ATL8S1 1061:5 68..32 0	0.55	g11362 9	47	473	6.2e- 39	ALGINA TE BIOSYN THESIS TRANSC RIPTIO NAL REGULA TORY PROTEI N ALGB [Pseud omonas	

169529	ATU031 469	ATL8C1 694:33 71..31 9	nap					ATL8C1 694:30 27..31 9	0.55	g30470 72	47	540	4.8e- 29	aerugi nosaj (AF058 825) No defini tion line found [Arabi dopsis thalia na]
169530	ATU031 470	ATL8C1 2581:1 ..3017	nap					ATL8C1 2581:6 58..19 52	0.54	g38920 45	47	515	2.1e- 43	(AC002 330) putati ve zinc finger protei n [Arabi dopsis thalia na]
169531	ATU031 471	ATL8C4 9840:1 201..1	nap					ATL8C4 9840:1 146..2 93	0.53	g21911 82	47	1193	6.0e- 75	(AF007 271) simila r to N. tabacu m membra ne- associ ated salt- induci ble protei

169532	ATU031 472	ATL8C1 7648:2 130..1	nap						ATL8C1 7648:1 988..1 338	0.53	g26513 10	47	248	3.5e- 22	n (PID:g 473874) [Arabi dopsis thalia na]
169533	ATU031 473	ATL8S2 3767:1 ..475	nap						ATL8S2 3767:1 03..45 9	0.52	g16528 37	47	130	5.4e- 11	(D9090 8) hypo thetical protein [Synec hocyst is sp.]
169534	ATU031 474	ATL8C4 2075:7 16..1	nap						ATL8C4 2075:5 92..11	0.52	g33193 43	47	1090	3.8e- 101	(AF077 407) contai ns simila rity to sugar transp

169535	ATU031 475	ATL8C3 5490:1 303..1	nap							ATL8C3 5490:6 13..10 2	0.51	g72977 5	47	364	3.8e- 34	orders (Pfam: sugar- tr.hmm , score: 395.91) [Arabi dopsis thalia nal]
169536	ATU031 476	ATL8C3 0457:1	nap							ATL8C3 0457:1	0.51	g45396 65	47	1361	1.1e- 137	HEAT SHOCK FACTOR PROTEI N HSF8 (HEAT SHOCK TRANSC RIPTIO N FACTOR 8) (HSTF 8) (HEAT STRESS TRANSC RIPTIO N FACTOR) [Lycop ersico n peruvi anum]
																(AF061 282)

169537	ATU031 477	312..1	nap				123..6 3	0.50	g30470 97	47	502	3.4e- 26	polypr otein [Sorgh um bicolor r] (AF058 826) contai ns simila rity to transp osases [Arabi dopsis thalia na]
169538	ATU031 478	ATL8C1 1769:5 01..12 20	nap				ATL8C2 4303:2 798..8 91	0.50	g45443 72	47	2196	3.9e- 225	(AC006 920) putati ve revers e transc riptas e [Arabi dopsis thalia na]
169539	ATU031 479	ATL8C4 004:12 35..1	nap				ATL8C4 004:10 85..75	0.49	g42635 22, g22450 38	47, 38	508, 352	8.0e- 45, 6.3e- 30	(AC004 044) hypoth etical protei n [Arabi dopsis

169540	ATU031-480	ATL8S2-9653:1..528	nap						0.49	g1787247	47	134	2.1e-09	thalia nal; (Z9734 2) hypoth etical protei n [Arabi dopsis thalia nal] (AE000 202) orf, hypoth etical protei n [Esche richia colij]
169541	ATU031-481	ATL8C3-0521:5322..3166	nap						0.49	g3319360	47	2054	2.3e-176	(AF077 408) contai ns simila rity to Vicia faba retrot ranspo son- like gene (GB:AB 007467) [Arabi

169542	ATU031 482	ATL8C1 4382:1 1..309 5	nap					ATL8C1 4382:1 1..309 5	0.48	g48862 86	47	217	2.0e- 15	dopsis thalia na] (AL050 300) putati ve protei n [Arabi dopsis thalia na]
169543	ATU031 483	ATL8C3 0388:1 90..30 34	nap					ATL8C3 0388:1 90..29 99	0.48	g43097 48	47	1395	3.3e- 134	(AC006 217) hypoth etical protei n [Arabi dopsis thalia na]
169544	ATU031 484	ATL8C1 8786:9 74..93	nap					ATL8C1 8786:7 67..49 7	0.47	g45875 50	47	1035	1.4e- 105	(AC006 577) EST gb R64 848 comes from this gene. [Arabi dopsis thalia na]
169545	ATU031 485	ATL8C2 4254:1 ..1685	nap					ATL8C2 4254:6 58..16 37	0.47	g26421 57	47	623	7.0e- 48	(AC003 000) ankyri n-like

169546	ATU031 486	ATL8C4 4890:7 35..17 94	nap					ATL8C4 4890:7 35..17 21	0.47	g34618 49	47	898	1.6e- 77	proteins [Arabidopsis thaliana]
169547	ATU031 487	ATL8S1 9590:5 13..1	nap					ATL8S1 9590:4 12..94	0.46	g30252 72	47	129	4.2e- 12	HYPOTHETICAL ZINC-TYPE ALCOHOL DEHYDR OGENAS E-LIKE PROTEIN IN CSIE- GLYCA INTERG ENIC REGION [Escherichia coli]
169548	ATU031 488	ATL8S7 513:49 ..186	nap					ATL8S7 513:49 ..184	0.46	g33554 81	47	186	1.9e- 12	(AC004218) hypothetical

169549	ATU031 489	ATL8C2 3076:1 ..508	nap						ATL8C2 3076:6 6..458	0.45	g11477 37	47	169	5.8e- 06	proteins [Arabidopsis thaliana]
															(U42203) third gene in fliQ operon ; membrane protein homolog [Caulobacter crescentus]
169550	ATU031 490	ATL8C1 3703:1 ..1503	nap						ATL8C1 3703:1 70..1503	0.44	g28276 51	47	856	1.2e- 91	(AL021637) putative protein [Arabidopsis thaliana]
169551	ATU031 491	ATL8C1 2439:1 ..913	nap						ATL8C1 2439:1 10..846	0.43	g24594 11	47	139	7.3e- 09	(AC002332) hypothetical protein

169552	ATU031 492	ATL8C7 569:16 99..1	nap					ATL8C7 569:16 24..82	0.42	g40068 31	47	2205	3.1e- 223	[Arabi dopsis thalia na] (AC005 970) putati ve revers e transc riptas e [Arabi dopsis thalia na]
169553	ATU031 493	ATL8C1 3884:6 49..30 60	nap					ATL8C1 3884:6 49..26 03	0.42	g44163 01	47	1609	1.6e- 155	(AF105 716) gag protei n [Zea mays]
169554	ATU031 494	ATL8C1 4361:1 945..2 97	nap					ATL8C1 4361:1 808..2 97	0.41	g36953 99	47	1542	1.6e- 157	(AF096 372) contai ns simila rity to Arabid opsis thalia na retrot ranspo son Athila (GB:X8

169555	ATU031 495	ATL8C1 8174:9 0..562	nap					ATL8C1 8174:2 14..37 1	0.41	g45673 02	47	215	5.0e- 23	(AC005 956) unknown protein [Arabi dopsis thalia na]
169556	ATU031 496	ATL8C1 3090:1 ..1329	nap					ATL8C1 3090:4 44..92 7	0.41	g48369 44	47	509	4.0e- 31	(AC006 085) Hypoth etical protein [Arabi dopsis thalia na]
169557	ATU031 497	ATL8S2 0546:1 ..507	nap					ATL8S2 0546:3 18..45 2	0.40	g45859 97	47	345	2.5e- 35	(AC005 287) Hypoth etical protein [Arabi dopsis thalia na]
169558	ATU031 498	ATL8C2 94:1.. 1505	nap					ATL8C2 94:241 ..1177	0.40	g44328 02	47	1589	2.5e- 116	(AC006 437) putati ve pol ypr

169559	ATU031 499	ATL8C4 2639:1 427..6 19	nap						ATL8C4 2639:9 80..61 9	0.40	g45392 95	47	637	1.0e- 52	(AL049 480) putati ve protei n [Arabi dopsis thalia na]
169560	ATU031 500	ATL8C3 1347:1 ..709	nap						ATL8C3 1347:2 0..557	0.40	g35519 54	47	280	9.1e- 25	(AF082 030) senesc ence- associ ated protei n 5 [Hemer ocalli s hybrid cultiv ar]
169561	ATU031 501	ATL8S1 6891:1 ..228	nap								g42204 78	47	116	3.3e- 10	(AC006 069) hypoth etical protei n [Arabi dopsis

169569	ATU031 509	ATL8S8 351:31 6..1	nap							g10018 17	47	161	5.2e- 13	(D6400 5) regula tory compon ents of sensor y transd uction system [Synec hocyst is sp.]
169570	ATU031 510	ATL8C3 105:43 8..1	nap							g29808 02	47	292	7.2e- 16	(AL022 197) transc riptio nal activa tor CBF1 - like protei n [Arabi dopsis thalia nal]
169571	ATU031 511	ATL8C2 7915:4 62..19 1	nap							g37859 87	47	350		(AC005 560) hypoth etical protei n [Arabi dopsis thalia

169572	ATU031 512	ATL8C4 4111:1 ..1959	nap							g49143 65	47	823	1.5e- 85	na] (AC007 289) hypoth etical protei n [Arabi dopsis thalia na]
169573	ATU031 513	ATL8C1 9713:1 076..1	nap							g21297 27	47	275	2.6e- 14	RNA- bindin g protei n 37 - Arabid opsis thalia na [Arabi dopsis thalia na]
169574	ATU031 514	ATL8C9 824:17 63..1	nap							g45394 60	47	210	4.2e- 16	(AL049 500) putati ve protei n [Arabi dopsis thalia na]
169575	ATU031 515	ATL8C9 531:1. .1252	nap							g43758 33	47	630	3.6e- 72	(AL021 713) recept or serine /threo

169576	ATU031 516	ATL8C5 0102:5 46..18 73	nap									g32427 11	47	1398	1.8e- 73	kinase -like protei n [Arabi dopsis thalia na]
169577	ATU031 517	ATL8C1 8102:1 ..657	nap									g45858 84	47	105	8.0e- 13	(AC005 850) Hypoth etical protei n [Arabi dopsis thalia na]
169578	ATU031 518	ATL8C1 3071:4 575..5 770	nap									g40380 56	47	954	1.6e- 68	(AC005 897) putati ve transp oson [Arabi dopsis thalia na]
169579	ATU031	ATL8C2	nap									g45859	47	232	6.8e-	(AC005)

169588	ATU031 528	ATL8S1 1088:2 72..1	nap										g45845 32	47	121	2.9e- 07	(AL049 608) hypoth etical protei n [Arabi dopsis thalia nal]
169589	ATU031 529	ATL8C1 6051:1 055..2 070	nap										g45585 56	47	429	1.3e- 51	(AC007 138) predic ted protei n of unknow n functi on [Arabi dopsis thalia nal]
169590	ATU031 530	ATL8S6 896:80 ..292	nap										g45673 11	47	328		(AC005 956) putati ve protei n kinase [Arabi dopsis thalia nal]

169595	ATU031 535	ATL8C2 3399:1 ..1843	nap							g42636 55	47	1426	4.2e- 144	(AC006 136) putati ve revers e transc riptas e [Arabi dopsis thalia na]
169596	ATU031 536	ATL8S1 9679:3 62..55 0	nap							g45824 62	47	124	3.8e- 09	(AC007 071) hypoth etical protei n [Arabi dopsis thalia na]
169597	ATU031 537	ATL8S1 1139:1 ..411	nap							g21260 92	47	268	1.1e- 25	traO protei n - Escher ichia coli plasmid

169598	ATU031 538	ATL8S2 3609:4 23..1	nap											g39414 70	47	484	1.8e- 42	pKM101 [Esche richia coli] (AF062 889) putati ve transc riptio n factor [Arabi dopsis thalia na]
169599	ATU031 539	ATL8C4 0605:7 00..14 2	nap											g38589 36	47	451	1.2e- 44	(AL021 636) putati ve protei n [Arabi dopsis thalia na]
169600	ATU031 540	ATL8C4 0565:5 8..361	nap											g46894 52	47	81	0.32	(AC006 267) putati ve transp oson protei n [Arabi dopsis thalia na]
169601	ATU031 541	ATL8S2 384:57	nap											g38314 62	47	498	1.1e- 32	(AC005 700) putati ve transp oson protei n [Arabi dopsis thalia na]

169605	ATU031 545	ATL8C9 129:89 7..276	nap							g99660	47	812	S- locus- specif ic glycop rotein SLR1 precu sor - Arabid opsis thalia na [Arabi dopsis thalia na]
169606	ATU031 546	ATL8C5 979:98 4..440	nap							g39278 25	47	414	(AC005 727) putati ve dUDP- glucos e 4-6- dehydr atase [Arabi dopsis thalia na]
169607	ATU031 547	ATL8S3 56:252 ..604	nap							g22286 88	47	95	(U8313 6) hypoth etical ABC transp orter [Rhodo bacter sphaer

169615	ATU031 555	ATL8C2 4735:1 289..7 672	nap										g45443 72	47	1891	7.8e- 202	(AC006 920) putati ve revers e transc riptas e [Arabi dopsis thalia na]	INTERG ENIC REGION [Esche richia coli]
169616	ATU031 556	ATL8S1 2746:5 21..1	nap										g44540 42	47	365	1.4e- 11	(AL035 394) putati ve protei n [Arabi dopsis thalia na]	
169617	ATU031 557	ATL8C2 1707:1 ..988	nap										g31932 94	47	1292	1.4e- 133	(AF069 298) simila r to revers e transc riptas es (Pfam: rvt.hm	

169618	ATU031 558	ATL8C1 7992:1 ..2491	nap							g45859 14	47	1223		m, score: 53.76) [Arabi dopsis thalia na]
														(AC006 298) putati ve MuDR MURA transp osase [Arabi dopsis thalia na]
169619	ATU031 559	ATL8C4 2775:3 11..1	nap							g16531 19	47	142	4.8e- 11	(D9091 1) transp osase [Synec hocyst is sp.]
169620	ATU031 560	ATL8C1 1563:5 28..1	nap							g21601 59	47	203	1.2e- 19	(AC000 132) F21M12 .4 gene produc t [Arabi dopsis thalia na]
169621	ATU031 561	ATL8C4 5210:5	nap							g13635 28	47	790	1.4e- 78	gag protei

169629	ATU031 569	ATL8C1 7061:1 378..3 41	nap										g45876 80	47	603	2.1e- 52	(AC007 197) putati ve cytoch rome p450 [Arabi dopsis thalia nal]	transp oson protei n [Arabi dopsis thalia nal]
169630	ATU031 570	ATL8C2 0557:2 126..8 20	nap										g27393 87	47	347	3.5e- 29	(AC002 505) hypoth etical protei n [Arabi dopsis thalia nal]	hypoth etical protei n [Arabi dopsis thalia nal]
169631	ATU031 571	ATL8S2 4815:4 81..1	nap										g18053 62	47	202	1.1e- 19	(D6414 4) IstB [Ralst onia eutrop ha]	(D6414 4) IstB [Ralst onia eutrop ha]
169632	ATU031 572	ATL8C3 9060:8 31..63 8	nap										g22621 61	47	243	1.7e- 13	(AC002 329) hypoth etical	(AC002 329) hypoth etical

169633	ATU031 573	ATL8S2 9067:4 10..1	nap								g28229 5	47	100	4.5e- 07	hypothetical protein, 35K - Lactococcus lactis [Arabis thaliana]
169634	ATU031 574	ATL8S1 3660:1 ..432	nap								g28304 5	47	96	0.995	hydroxyphenyl-rich glycoprotein - maize [Zea mays]
169635	ATU031 575	ATL8C3 2515:1 ..1126	nap								g45389 00	47	351	1.5e- 31	(AL049482) putative protein [Arabis thaliana]
169636	ATU031 576	ATL8C1 7334:1	nap								g28277 10	47	286	1.9e- 17	(AL021684)

169637	ATU031 577	..1224	nap							g28015 36	47	338	3.4e- 35	lysosomal Pro-X carboxypeptidase-like protein [Arabidopsis thaliana]
169638	ATU031 578	ATL8S7 173:53 1..1	nap							g18715 77	47	52	0.10	(Y11553) putative 21kD protein precursor [Medicago sativa]
169639	ATU031 579	ATL8S2 2748:1 ..649	nap							ATL8S2 2748:6 5..649	46	681	8.4e- 68	CHROMO SOMAL REPLICATION

169640	ATU031 580	ATL8C4 2066:8 94..1	nap				ATL8C4 2066:6 87..45	0.99	g45586 85	46	656	6.0e- 66	INITIA TOR PROTEI N DNAA [Vibri o harvey il] (AC006 586) putati ve TNP1 protei n of the Taml transp oson of Antirr hinum majus [Arabi dopsis thalia na]
169641	ATU031 581	ATL8C2 0032:6 67..63	nap				ATL8C2 0032:5 95..63	0.99	g33675 77	46	684		(AL031 135) putati ve protei n [Arabi dopsis thalia na]
169642	ATU031 582	ATL8C2 638:41 9..1	nap				ATL8C2 638:15 3..28	0.99	g31222 65	46	223	2.2e- 18	EUKARY OTIC TRANSL

169644	ATU031 584	ATL8C1 6739:1 ..528	nap				ATL8C1 6739:5 8..393	0.98	g33090 84	46	155	2.5e- 06	(AF076 252) calcin eurin B-like protei n 2 [Arabi dopsis thalia na]
169645	ATU031 585	ATL8C1 712:1. .873	nap				ATL8C1 712:93 ..765	0.97	g28950 95	46	348	2.2e- 36	(AF011 337) putati ve E1- E2 ATPase [Mus muscul us]
169646	ATU031 586	ATL8C4 8401:2 30..68 5	nap				ATL8C4 8401:2 30..48 9	0.97	g38611 74	46	51	0.0013	(AJ235 272) 50S RIBOSO MAL PROTEI N L17 (rplQ) [Ricke ttsia prowaz eki]
169647	ATU031 587	ATL8C4 1163:1 ..516	nap				ATL8C4 1163:4 01..32 7	0.97	g45859 97	46	182	2.9e- 12	(AC005 287) Hypoth etical protei n [Arabi dopsis]

169648	ATU031 588	ATL8C2 9466:6 0..566	nap				ATL8C2 9466:6 0..527	0.97	g12280 4	46	131	0.994	7- ALPHA- HYDROX YSTERO ID DEHYDR OGENAS E (7- ALPHA- HSDH) [Esche richia colil]
169649	ATU031 589	ATL8C9 752:12 84..1	nap				ATL8C9 752:91 0..96	0.97	g33602 89	46	239	1.7e- 14	(AF023 164) leucin e-rich repeat transm embran e protei n kinase l [Zea mays]
169650	ATU031 590	ATL8C1 8582:1 ..2098	nap				ATL8C1 8582:8 4..157 2	0.96	g31354 93	46	956	5.2e- 77	(AF060 248) unknow n [Arabi dopsis thalia na]
169651	ATU031 591	ATL8C3 7482:2 538..1	nap				ATL8C3 7482:2 538..9	0.94	g39158 66	46	946		GLUTAM INYL- TRNA

169652	ATU031 592	ATL8S2 3823:3 20..1	nap				4	0.94	g32984 41	46	142	8.3e- 09	SYNTHETASE (GLUTAMINE-- TRNA LIGASE) (GLNRS) [Lupinus luteus]
169653	ATU031 593	ATL8C1 1988:1 508..1	nap				ATL8S2 3823:2 76..75	0.94	g40564 90	46	1091	5.1e- 76	(ABO10 879) chloroplast ribosomal protein L10 [Nicotiana tabacum]
169654	ATU031 594	ATL8C6 000:57 6..1	nap				ATL8C6 000:55 2..50	0.93	g36680 75	46	216	1.5e- 16	(AC005 896) hypothetical protein [Arabidopsis thaliana]
													(AC004 667) hypothetical protein

169655	ATU031 595	ATL8S1 5425:1 ..168	nap				ATL8S1 5425:5 3..137	0.93	g22811 03	46	161	2.7e- 13	n [Arabi dopsis thalia nal] (AC002 333) Glucan endo- 1,3- beta glucos idase isolog [Arabi dopsis thalia nal]
169656	ATU031 596	ATL8C4 3635:4 377..3 764	nap				ATL8C4 3635:4 352..3 764	0.93	g24355 11	46	432		(AF024 504) contai ns simila rity to prolyl 4- hydrox ylase alpha subuni t [Arabi dopsis thalia nal]
169657	ATU031 597	ATL8C1 4391:1 ..680	nap				ATL8C1 4391:7 8..680	0.93	g46789 29	46	536	1.2e- 52	(AL049 711) serine -type

169658	ATU031 598	ATL8S1 3164:1 ..367	nap				ATL8S1 3164:4 6..271	0.93	g28967 23	46	403	8.8e- 38	(AL021 897) hypoth etical protei n Rv1086 [Mycob acteri um tuberc ulosis]	carbox ypepti dase like protei n [Arabi dopsis thalia na]
169659	ATU031 599	ATL8S3 0316:5 49..37 9	nap				ATL8S3 0316:4 65..37 9	0.92	g28326 63	46	103	9.8e- 09	(AL021 710) hypoth etical protei n [Arabi dopsis thalia na]	carbox ypepti dase like protei n [Arabi dopsis thalia na]
169660	ATU031 600	ATL8C1 9570:1 453..1 62	nap				ATL8C1 9570:1 389..1 62	0.92	g30803 96	46	699	2.0e- 69	(AL022 603) putati ve protei n [Arabi dopsis thalia na]	carbox ypepti dase like protei n [Arabi dopsis thalia na]

169661	ATU031 601	ATL8S2 2742:5 14..1	nap							ATL8S2 2742:4 87..26	0.92	g11843 6	46	99	0.0014	dopsis thalia na]
169662	ATU031 602	ATL8C6 461:68 5..1	nap							ATL8C6 461:52 9..107	0.91	g42494 16	46	258	7.0e- 28	(AC006 072) putati ve exorib onucle ase (also contai ns zinc- finger C2H2- type domain) [Arabi dopsis thalia na]
169663	ATU031 603	ATL8S2 459:1. .538	nap							ATL8S2 459:21 3..504	0.91	g12703 1	46	395	2.5e- 34	CYSTAT HIONIN E BETA- LYASE (CBL) (BETA- CYSTAT HIONAS E)

169664	ATU031 604	ATL8C1 5770:1 ..723	nap					ATL8C1 5770:3 02..72 3	0.91	g32419 46	46	693	2.3e- 71	(CYSTE INE LYASE) [Esche richia coli]
169665	ATU031 605	ATL8S2 6388:1 ..501	nap					ATL8S2 6388:4 9..486	0.90	g48503 82	46	233		(AC007 357) Simila r to gb D38 124 EREBP- 3 from Nicoti ana tabacu m and contai ns PF 008 47 AP2 domain [Arabi dopsis thalia na]
169666	ATU031 606	ATL8C4 7036:8	nap					ATL8C4 7036:8	0.90	g45875 18	46	720	6.3e- 76	(AC007 060)

169667	ATU031 607	ATL8C2 6170:1 ..1279	nap					19..23 2	0.90	g30634 64	46	741	8.2e- 58	(AC003 981) F22013 .26 [Arabi dopsis thalia na]	Strong simila rity to F19I3. 8 []
169668	ATU031 608	ATL8C2 6223:1 30..54 1	nap					ATL8C2 6223:1 97..52 5	0.90	g39246 10	46	94	1.9e- 11	(AF069 442) putati ve ubiqui tin- like protei n [Arabi dopsis thalia na]	
169669	ATU031 609	ATL8C2 2116:2 524..2 6	nap					ATL8C2 2116:2 466..2 6	0.89	g16958 82	46	589	1.3e- 58	(U6374 3) mitoti c centro mere- associ ated kinesi n [Homo sapien s]	

169670	ATU031 610	ATL8C4 5122:1 798..1	nap				ATL8C4 5122:1 790..9	0.87	g47738 81	46	2253	6.0e- 224	(AF076 243) ~ putati ve transp oson protei n [Arabi dopsis thalia na]
169671	ATU031 611	ATL8C4 4959:8 85..1	nap				ATL8C4 4959:6 21..21	0.87	g48743 03	46	541	1.1e- 54	(AC006 053) putati ve transc riptio n elonga tion factor [Arabi dopsis thalia na]
169672	ATU031 612	ATL8S2 2543:5 88..1	nap				ATL8S2 2543:5 54..26	0.87	g28280 15	46	692	2.0e- 63	(AF036 940) salicy late- 5- hydrox ylase large oxygen ase compon ent [Pseud omonas

169673	ATU031 613	ATL8C4 28:753 ..2355	nap				ATL8C4 28:144 7..228 9	0.87	g28092 35	46	104	2.2e- 07	sp. U2] (AC002 560) F21B7. 4 [Arabi dopsis thalia na]
169674	ATU031 614	ATL8C2 8305:4 73..11 82	nap				ATL8C2 8305:4 73..11 05	0.87	g45843 50	46	722	6.3e- 58	(AC007 127) hypoth etical protei n [Arabi dopsis thalia na]
169675	ATU031 615	ATL8C1 1445:2 82..17 84	nap				ATL8C1 1445:1 121..1 773	0.86	g42040 95	46	325	7.2e- 29	(AF030 260) CYP94A 1 [Vicia sativa]
169676	ATU031 616	ATL8C1 9044:9 76..1	nap				ATL8C1 9044:5 28..23 7	0.86	g31766 60	46	1505	1.8e- 130	(AC004 393) Simila r to ERECTA recept or protei n kinase gb U47 029 from

169677	ATU031 617	ATL8C1 3867:1 268..1	nap				ATL8C1 3867:1 183..5 9	0.86	g21601 61	46	405	2.6e- 42	A. thalia na. [Arabi dopsis thalia na]
169678	ATU031 618	ATL8C1 5778:1 476..5 5	nap				ATL8C1 5778:1 359..5 5	0.86	g33416 91	46	515	6.9e- 47	(AC003 672) putati ve hetero geneou s nuclea r ribonu cleopr oteins Al [Arabi dopsis thalia na]
169679	ATU031 619	ATL8S3 848:1. .397	nap				ATL8S3 848:22 7..371	0.86	g36953 81	46	420	1.1e- 36	(AF096 370) contai ns simila

169680	ATU031 620	ATL8C5 81:132 9..1	nap					ATL8C5 81:132 9..312	0.85	g25650 07	46	1991	5.6e- 168	rity to Arabid opsis thalia na revers e- transc riptas e-like protei ns [Arabi dopsis thalia na]
169681	ATU031 621	ATL8S8 358:1. .152	nap					ATL8S8 358:11 ..85	0.85	g60795 4	46	91	0.15	(U1282 3) hemoly sin [Acant hamoeb a polyph agal]
169682	ATU031 622	ATL8C8 436:1.	nap					ATL8C8 436:72	0.85	g37023 31	46	1213	1.7e- 101	(AC005 397)

169683	ATU031 623	ATL8C6 195:1. .2813	nap					..1578	0.85	g14957 68	46	1210	1.2e- 83	hypothetical protein [Arabidopsis thaliana] (Z68506) chloroplast inner envelope protein, 110 kD (IEP110) [Pisum sativum]
169684	ATU031 624	ATL8C3 3057:9 40..25	nap					ATL8C3 3057:8 78..24 0	0.84	g49144 13	46	822	6.9e- 86	(AL050352) choline monooxygenase-like protein [Arabidopsis thaliana]
169685	ATU031 625	ATL8C7 334:1. .331	nap					ATL8C7 334:10 ..210	0.84	g47339 62	46	315	3.2e- 15	(AC007261) unknown

169687	ATU031 627	ATL8C3 6291:5 62..11 45	nap				ATL8C3 6291:5 62..11 33	0.83	g41513 21	46	435	1.8e- 43	(AF089 085) putati ve auxin efflux carrie r protei n; AtPIN1 [Arabi dopsis thalia na]
169688	ATU031 628	ATL8C1 0823:1 847..1	nap				ATL8C1 0823:1 847..3 01	0.83	g40380 57	46	948	6.5e- 92	(AC005 897) hypoth etical protei n [Arabi dopsis thalia na]
169689	ATU031 629	ATL8C3 2052:1 ..1537	nap				ATL8C3 2052:8 7..152 2	0.81	g34026 77	46	962	8.5e- 95	(AC004 697) hypoth etical protei n [Arabi dopsis thalia na]
169690	ATU031 630	ATL8C4 3037:3 461..8 45	nap				ATL8C4 3037:3 275..8 45	0.81	g24594 26	46	859	6.0e- 90	(AC002 332) putati ve splici

169691	ATU031 631	ATL8C3 9583:1 ..4341	nap																ng factor U2AF large chain [Arabi dopsis thalia na]
																			(AC005 489) F14N23 .4 [Arabi dopsis thalia na]; (AC004 557) F17L21 .7 [Arabi dopsis thalia na]
																			1.4e- 171, 2.0e- 95
																			1725, 993
																			46, 38
																			g49143 18, g39351 64
																			0.80, 0.50
																			ATL8C3 9583:2 523..3 5, ATL8C3 9583:2 754..4 010
																			ATL8C2 6264:6 4..113 9
																			0.80
																			g30154 88
																			1.4e- 54
																			(U5847 4) recept or- like protei n kinase [lycop ersico n escule ntum]
169692	ATU031 632	ATL8C2 6264:1 ..1175	nap																542
																			46
																			g16527 04
																			2.6e- 07
																			109
																			46
169693	ATU031 633	ATL8C2 9716:1	nap																2.6e- 07
																			(D9090 7)

169694	ATU031 634	..1570	nap					0..155 5	0.79	g21911 96	46	143	3.3e- 12	hypothetical protein [Synecchocystis sp.] (AF007271) contains a MADS domain [Arabidopsis thaliana]
169695	ATU031 635	ATL8S2 8155:4 52..1	nap					ATL8S2 8155:4 52..50	0.79	g10733 02	46	417	1.4e- 40	2,4-dihydroxyhept-2-ene-1,7-dioic acid aldolase - Escherichia coli [Escherichia coli]
169696	ATU031 636	ATL8C1 406:1. .1592	nap					ATL8C1 406:63 6..142 2	0.79	g38602 46, g42630 63	46, 37	489, 1104	4.3e- 49, 3.1e- 95	(AC005824) putative reverse-

169697	ATU031 637	ATL8C1 1331:3 17..84 3	nap					ATL8C1 1331:4 32..79 1	0.79	g48369 03	46	552	3.2e- 51	(AC007 369) Simila r to phosph ate transp orter protei ns [Arabi dopsis thalia na]
169698	ATU031 638	ATL8S1 1958:5 4..580	nap					ATL8S1 1958:5 4..293	0.79	g10545 84	46	195	4.7e- 15	(D3225 3) putati ve protei n highly

169699	ATU031 639	ATL8C2 891:20 28..1	nap				ATL8C2 891:20 28..20 2	0.77	g35488 05	46	1448	4.7e- 141	homolo gous to E. coli RNase HII . [Magne tospir illum sp.]
169700	ATU031 640	ATL8S9 118:52 6..1	nap				ATL8S9 118:44 5..47	0.77	g22931 94	46	387	7.3e- 34	(AC005 313) unknow n protei n [Arabi dopsis thalia na]
169701	ATU031 641	ATL8C3 1953:4 61..1	nap				ATL8C3 1953:4 61..10	0.77	g45859 24	46	303	1.2e- 24	(AC007 211) hypothe tical protei n [Arabi dopsis thalia na]
169702	ATU031 642	ATL8S1 7746:4 05..1	nap				ATL8S1 7746:1 06..10	0.77	g18853 10	46	186	1.4e- 18	(X9165 9) Endoxy

169703	ATU031 643	ATL8C9 904:17 31..1	nap					ATL8C9 904:87 6..710	0.77	g45859 86, g42621 75	46, 36	143, 180	1.4e- 07, 7.3e- 13	(AC005 287) Hypoth etical protei n [Arabi dopsis thalia na]; (AC005 508) 12894 [Arabi dopsis thalia na]	an transf erase (EXT) [Horde um vulgar e]
169704	ATU031 644	ATL8C2 1614:1 941..1	nap					ATL8C2 1614:1 787..2 5	0.76	g42204 79	46	1377	7.3e- 134	(AC006 069) unknow n protei n [Arabi dopsis thalia na]	
169705	ATU031 645	ATL8C6 369:1. .1294	nap					ATL8C6 369:68 2..806	0.76	g40380 62	46	838	3.0e- 83	(AC005 897) putati ve	

169706	ATU031 646	ATL8S1 3016:1 ..545	nap					ATL8S1 3016:5 4..471	0.75	g23180 63	46	230	4.2e- 23	(AF012 532) YeeC [Bacil lus subtil is]	transp oson MuDR [Arabi dopsis thalia na]
169707	ATU031 647	ATL8C7 988:42 7..298 0	nap					ATL8C7 988:42 7..292 1	0.75	g27729 00	46	319	5.6e- 24	(AF017 185) protei n tyrosi ne phosph atase and tensin homolo g/muta ted in multip le advanc ed cancer s protei n [Rattu s norveg icus]	
169708	ATU031	ATL8C2	nap					ATL8C2	0.74	g43253	46	833	3.9e-	(AF128	

648	6697:1 ..816				6697:6 0..798	77			87	396) simila r to maize transp oson MuDR- like protei ns [Arabi dopsis thalia na]	
169709	ATU031 649	ATL8C4 875:30 86..1	nap		ATL8C4 875:28 34..28 4	0.74	g29613 74, g25586 57	46, 30	1131, 585	2.3e- 115, 3.6e- 95	(AL022 141) putati ve diseas e resist ance protei n [Arabi dopsis thalia na]; (AC002 354) No defini tion line found [Arabi dopsis thalia na]
169710	ATU031	ATL8C2	nap		ATL8C2	0.73	g48877	46	483	1.8e-	(AC006

169711	650	8663:1 04..12 89						8663:1 25..10 06	55				32	533) putati ve acetol actate syntha se [Arabi dopsis thalia na]
169711	ATU031 651	ATL8C4 4730:4 214..8 33	nap					ATL8C4 4730:4 214..2 153	g42638 31	46	2834	1.8e- 287	(AC006 067) putati ve revers e transc riptas e [Arabi dopsis thalia na]	
169712	ATU031 652	ATL8C4 9554:8 81..1	nap					ATL8C4 9554:8 18..39	g39278 36	46	411	4.3e- 43	(AC005 727) unknow n protei n [Arabi dopsis thalia na]	
169713	ATU031 653	ATL8C1 9540:1 ..2613	nap					ATL8C1 9540:5 4..252 5	g45220 05	46	1909	1.3e- 191	(AC007 069) putati ve revers e	

169714	ATU031 654	ATL8C2 5606:6 44..26 28	nap					ATL8C2 5606:6 44..25 67	0.71	g11495 69	46	1637	1.1e- 147	(Z5085 1) HD- zip [Arabi dopsis thalia na]	transc riptas e [Arabi dopsis thalia na]
169715	ATU031 655	ATL8C1 13:262 3..1	nap					ATL8C1 13:184 9..164	0.71	g46462 08	46	972		(AC007 230) Contai ns simila rity to F13P17 .8	(AC007 230) Contai ns simila rity to F13P17 .8
169716	ATU031 656	ATL8C1 3331:5 55..1	nap					ATL8C1 3331:4 28..83	0.71	g48357 67	46	236	1.1e- 23	(AC007 202) T8K14. 16 [Arabi dopsis thalia na]	(AC007 202) T8K14. 16 [Arabi dopsis thalia na]
169717	ATU031 657	ATL8C1 081:1. .1033	nap					ATL8C1 081:89 ..1033	0.70	g22448 65	46	848	8.2e- 80	(Z9733 7) hypoth etical protei n [Arabi dopsis thalia	(Z9733 7) hypoth etical protei n [Arabi dopsis thalia

169718	ATU031 658	ATL8C1 6084:8 81..1	nap				ATL8C1 6084:7 48..8	0.70	g44553 11	46	1340	4.5e- 136	na] (AL035 528) putati ve diseas e resist ance protei n [Arabi dopsis thalia na]
169719	ATU031 659	ATL8C1 0888:1 ..1922	nap				ATL8C1 0888:1 60..19 22	0.70	g42638 25	46	1969	4.4e- 184	(AC006 067) hypoth etical protei n [Arabi dopsis thalia na]
169720	ATU031 660	ATL8S2 8804:1 ..582	nap				ATL8S2 8804:6 0..569	0.70	g26345 70	46	87	0.84	(Z9911 5) UV- damage repair protei n [Bacte rioph age SPBc2]
169721	ATU031 661	ATL8C3 3897:1 052..1	nap				ATL8C3 3897:7 80..31 8	0.69	g28277 10	46	391		(AL021 684) lysoso mal Pro-X

169722	ATU031 662	ATL8C1 892:1. .1836	nap							ATL8C1 892:42 ..1790	0.69	g43888 18	46	2364	4.2e- 243	carboxypeptidase-like protein [Arabidopsis thaliana] (AC006528) putative polypeptide with a Zn-finger CCHC type domain (prosite:QDO C50158) and a DDE integrase signature motif [Arabidopsis thaliana] (AC003979) Contains
169723	ATU031 663	ATL8C2 5143:7 97..1	nap							ATL8C2 5143:5 81..30	0.68	g32876 91	46	191	2.2e- 17	carboxypeptidase-like protein [Arabidopsis thaliana] (AC006528) putative polypeptide with a Zn-finger CCHC type domain (prosite:QDO C50158) and a DDE integrase signature motif [Arabidopsis thaliana] (AC003979) Contains

169724	ATU031 664	ATL8C1 0742:9 7..699	nap					ATL8C1 0742:1 84..56 9	0.68	g21296 36	46	677	9.9e- 67	similarity to RING zinc finger protein gb X95 455 from Gallus gallus [Arabi dopsis thalia na]
169725	ATU031 665	ATL8C1 5472:9 03..1	nap					ATL8C1 5472:8 88..13 6	0.68	g30471 04	46	487	5.0e- 44	(AF058 919) No defini tion line found [Arabi dopsis thalia na]
169726	ATU031	ATL8C4	nap					ATL8C4	0.67	g21911	46	142	5.7e-	(AF007

	666	2556:1 07..56 0						2556:1 07..51 3	96				16	271) contai ns a MADS domain [Arabi dopsis thalia na]
169727	ATU031 667	ATL8C2 9971:1 41..74 4	nap					ATL8C2 9971:1 41..57 0	g23471 94	46	420	9.8e- 42	(AC002 338) hypo thetical prote in [Arabi dopsis thalia na]	
169728	ATU031 668	ATL8S1 5941:5 75..1	nap					ATL8S1 5941:5 22..31	g11613 80	46	192	3.9e- 19	(U4336 6) IcaA [Staph ylococ cus epider midis]	
169729	ATU031 669	ATL8C4 9370:2 07..73 9	nap					ATL8C4 9370:3 05..69 4	g24627 60	46	164	1.6e- 06	(AC002 292) Hypo thetical prote in [Arabi dopsis thalia na]	
169730	ATU031 670	ATL8S2 5126:2 11..52	nap					ATL8S2 5126:2 11..47	g33784 31	46	247	5.0e- 22	(AF079 317) decarb	

[illegible]

169731	ATU031 671	ATL8C4 1447:1 ..266	nap					6	ATL8C4 1447:9 1..266	0.65	g42630 57	46	190	1.6e- 17	(AC005 142) hypoth etical protei n [Arabi dopsis thalia na]	oxylas e [Sphin gomona s aromat icivor ans]
169732	ATU031 672	ATL8S1 1861:1 04..43 4	nap						ATL8S1 1861:3 73..11 2	0.65	g73192 8	46	180	9.5e- 17	HYPOTH ETICAL 27.4 KD PROTEI N IN HYR1 3'REGI ON [Sacch aromyc es cerevi siae]	
169733	ATU031 673	ATL8S2 9370:1 ..603	nap						ATL8S2 9370:9 2..496	0.65	g17309 15	46	413	1.0e- 26	HYPOTH ETICAL 48.8 KD GTP- BINDIN G PROTEI	

169734	ATU031 674	ATL8S2 3971:1 ..543	nap					ATL8S2 3971:1 04..54 3	0.64	g13998 30	46	202	6.1e- 16	(U5923 5) biotin carbox yl carrie r protei n [Synec hococc us PCC794 2]	N IN CMK- GPSA INTERG ENIC REGION [Bacil lus subtil is]
169735	ATU031 675	ATL8C3 0927:1 ..1120	nap					ATL8C3 0927:3 3..112 0	0.63	g38057 69, g45672 98	46, 32	762, 236	2.6e- 79, 3.0e- 10	(AC005 693) putati ve mudR- like transp oson [Arabi dopsis thalia nal; (AC006 918) putati ve	

169736	ATU031 676	ATL8C1 6763:3 80..31 80	nap					ATL8C1 6763:3 80..31 15	0.62	g37023 33	46	129	8.9e- 13	MuDR MURA transp osase [Arabi dopsis thalia na]
169737	ATU031 677	ATL8C2 287:1. .1094	nap					ATL8C2 287:40 0..858	0.62	g42636 54	46	569	8.4e- 73	(AC005 397) hypo thetical protei n [Arabi dopsis thalia na]
169738	ATU031 678	ATL8C9 22:242 4..354 7	nap					ATL8C9 22:327 6..273 5	0.61	g40564 37	46	339	1.2e- 11	(AC006 136) putati ve revers e transc riptas e [Arabi dopsis thalia na]
														(AC005 990) Strong simila rity to PFAM PF1000 69

169739	ATU031 679	ATL8S6 930:56 0..42	nap					ATL8S6 930:43 5..42	0.60	g39151 49	46	134			Eukaryotic protein kinase domain [Arabidopsis thaliana]
169740	ATU031 680	ATL8C3 3407:2 096..1 453	nap					ATL8C3 3407:2 096..1 457	0.60	g47339 82	46	262	7.6e-16		(AC007268) hypothetical protein [Arabidopsis thaliana]
169741	ATU031 681	ATL8C4 5040:1 793..3 35	nap					ATL8C4 5040:1 757..3 70	0.59	g36458 99	46	2352	1.4e-243		(U68408) 5' end not determined experimentally [Zea mays]
169742	ATU031	ATL8S1	nap					ATL8S1	0.59	g31697	46	293	4.6e-		(AF007

	682	3414:4 73..1					3414:4 72..21	21		46	470	20	569) Gstr [Brady rhizob ium japoni cum]
169743	ATU031 683	ATL8C2 4824:1 ..1820	nap				ATL8C2 4824:9 91..40	0.59	g23350 96	46	470	1.1e- 33	(AC002 339) hypoth etical protei n [Arabi dopsis thalia na]
169744	ATU031 684	ATL8C1 640:48 77..20 66	nap				ATL8C1 640:47 62..32 45	0.57	g45443 72	46	1874	9.5e- 253	(AC006 920) putati ve revers e transc riptas e [Arabi dopsis thalia na]
169745	ATU031 685	ATL8C1 5310:5 ..725	nap				ATL8C1 5310:5 ..525	0.57	g48357 80	46	413	7.6e- 32	(AC007 296) Strong simila rity to gb AF0 49347 berber ine

169746	ATU031 686	ATL8C1 3756:9 56..1	nap				ATL8C1 3756:7 91..16	0.56	g45103 94	46	1026	8.8e- 99	bridge enzyme from Berber is stolon ifera. [Arabi dopsis thalia nal]
169747	ATU031 687	ATL8C4 3712:3 12..13 12	nap				ATL8C4 3712:9 46..12 19	0.55	g42622 44	46	114		(AC006 200) hypo thetical protein [Arabi dopsis thalia nal]
169748	ATU031 688	ATL8C3 6910:1 ..1636	nap				ATL8C3 6910:2 87..16 36	0.54	g91314 0	46	1692	9.0e- 166	ARK2 produc t/rece ptor- like serine /threo nine protei

169749	ATU031 689	ATL8C1 7071:1 287..1	nap						ATL8C1 7071:9 09..69 1	0.54	g42180 00	46	764	1.1e- 60	n kinase ARK2 [Arabi dopsis thalia na, Columb ia, Peptid e, 850 aa] (AC006 135) putati ve membra ne transp orter [Arabi dopsis thalia na]
169750	ATU031 690	ATL8C6 90:1.. 788	nap						ATL8C6 90:554 ..88	0.54	g31525 98	46	1244	1.5e- 112	(AC002 986) Contai ns simila rity to C2- HC type zinc finger protei n C.e- MyT1 gb U67 079

169753	ATU031 693	ATL8C4 4257:2 668..1	nap				ATL8C4 4257:2 545..3 05	0.51	g37575 16	46	892	2.5e- 89	(AC005 167) putati ve TMV resist ance protei n [Arabi dopsis thalia na]
169754	ATU031 694	ATL8C1 5593:1 ..1041	nap				ATL8C1 5593:2 2..877	0.51	g32978 08	46	1319	6.3e- 135	(AL031 032) putati ve protei n [Arabi dopsis thalia na]
169755	ATU031 695	ATL8C3 3615:1 ..824	nap				ATL8C3 3615:2 ..607	0.51	g21601 73	46	201	4.4e- 17	(AC000 132) Simila r to N. tabacu m salt- induci ble protei n (gb U0 8285). [Arabi dopsis thalia na]

169756	ATU031 696	ATL8C5 538:84 1..1	nap				ATL8C5 538:53 0..57	0.51	g17698 98	46	634	1.3e- 64	(Y0801 0) lectin recept or kinase [Arabi dopsis thalia na]
169757	ATU031 697	ATL8C1 9343:3 685..2 560	nap				ATL8C1 9343:3 612..2 560	0.50	g45444 21	46	1367	1.1e- 141	(AC006 955) putati ve revers e transc riptas e [Arabi dopsis thalia na]
169758	ATU031 698	ATL8S1 9903:1 ..532	nap				ATL8S1 9903:4 0..517	0.50	g17862 84	46	582	1.8e- 50	(AE000 119) cell divisi on; forms circum ferent ial ring; tubuli n-like GTP- bindin g protei n and

169759	ATU031 699	ATL8C2 0195:1 92..24 38	nap					ATL8C2 0195:1 92..24 23	0.49	g44173 09	46	1531	2.7e- 152	GTPase [Esche richia coli]
169760	ATU031 700	ATL8C2 1500:6 48..79	nap					ATL8C2 1500:5 84..40 2	0.48	g45859 93	46	74	0.992	(AC005 287) Simila r to serine /threo nine kinase s [Arabi dopsis thalia na]
169761	ATU031 701	ATL8C4 3145:1 ..467	nap					ATL8C4 3145:1 56..38 5	0.48	g45872 11	46	300	1.1e- 31	(AB021 126) cAMP- depend ent protei

169762	ATU031 702	ATL8C9 470:20 28..1	nap					ATL8C9 470:18 18..21 7	0.48	g29613 74	46	986	1.6e- 91	(AL022 141) putati ve diseas e resist ance protei n [Arabi dopsis thalia na]	n kinase cataly tic subuni t [Eugle na gracil is]
169763	ATU031 703	ATL8C2 1835:1 85..26 47	nap					ATL8C2 1835:1 85..25 78	0.48	g33954 40	46	234	1.7e- 20	(AC004 683) hypoth etical protei n [Arabi dopsis thalia na]	(AC004 683) hypoth etical protei n [Arabi dopsis thalia na]
169764	ATU031 704	ATL8C3 9162:2 459..1	nap					ATL8C3 9162:7 14..26 6, ATL8C3 9162:2	0.48, 0.87	g49143 61	46	1786	1.6e- 182	(AC007 289) putati ve revers e	(AC007 289) putati ve revers e

169765	ATU031 705	ATL8C1 6309:1 000..1	nap				459..1 105	0.48	g44553 10	46	1157	1.5e- 121	transc ription [Arabi dopsis thalia na]
							ATL8C1 6309:9 71..8						(AL035 528) putati ve diseas e resist ance protei n [Arabi dopsis thalia na]
169766	ATU031 706	ATL8C3 4345:1 ..798	nap				ATL8C3 4345:6 0..407	0.47	g39534 74	46	235	1.1e- 20	(AC002 328) F2202. 19 [Arabi dopsis thalia na]
169767	ATU031 707	ATL8C6 018:21 0..602	nap				ATL8C6 018:44 3..281	0.47	g38941 63	46	593	1.0e- 58	(AC005 312) simila r to phloem - specif ic lectin [Arabi dopsis

169768	ATU031 708	ATL8C6 371:20 15..1	nap				ATL8C6 371:20 15..89	0.45	g35496 26	46	678	1.4e- 80	(AJ009 696) wall- associ ated kinase 1 [Arabi dopsis thalia na]
169769	ATU031 709	ATL8C4 7896:2 004..1	nap				ATL8C4 7896:1 908..3 5	0.45	g39246 09	46	1979	1.5e- 200	(AF069 442) putati ve polypr oteins of LTR transp oson [Arabi dopsis thalia na]
169770	ATU031 710	ATL8C7 781:61 8..119 9	nap				ATL8C7 781:11 27..11 99	0.44	g10844 15	46	92	0.055	RNA- bindin g protei n - Wood tobacc o [Nicot iana sylves tris]
169771	ATU031 711	ATL8C4 7666:1	nap				ATL8C4 7666:1	0.44	g38501 11	46	411	9.3e- 38	(AL033 388)

169772	ATU031 712	ATL8C1 0316:1 257..5 7	nap					28..42 0	0.43	g31932 96	46	1208		hypoth etical integr al membra ne protei n, putati ve involv ement in lipid metabo lism [Schiz osacch aromyc es pombel] (AF069 298) simila r to pectin esterase [Arabi dopsis thalia na]
169773	ATU031 713	ATL8S1 3585:5 48..1	nap					ATL8S1 3585:4 91..12 8	0.42	g18813 38	46	333	2.2e- 08	(AB001 488) PROBAB LE INTEGR AL MEMBRA NE

169774	ATU031 714	ATL8C2 4177:3 949..6 23	nap						ATL8C2 4177:3 686..6 23	0.42	g45389 21	46	743	2.2e- 74	PROTEI N, SIMILA R TO CHLORA MPHENI COL RESIST ANCE PROTEI N OF STREPT OMYCES VENEZU ELAE. [Bacil lus subtil is]
169775	ATU031 715	ATL8C7 667:1. .1034	nap						ATL8C7 667:45 4..574	0.42	g18711 96	46	148	2.4e- 07	(U9043 9) GMP kinase isolog [Arabi dopsis thalia na]
169776	ATU031 716	ATL8C3 3064:8 51..1	nap						ATL8C3 3064:6 62..24	0.41	g40564 96	46	305	6.7e- 23	(AC005 896) unknow

																lus cereus]
169780	ATU031720	ATL8S6419:603..1	nap					ATL8S6419:475..262	0.40		g111370	46	130			alpha-L-fucosidase (EC 3.2.1.51) precursor - rat []
169781	ATU031721	ATL8S16252:410..1	nap								g2149794	46	117	1.9e-06	(U92846) matura se [Davidsonia pruriens]	
169782	ATU031722	ATL8C23941:1..1619	nap								g2341045	46	1929	2.4e-169	(AC000104) F19P19.16 [Arabi dopsis thaliana]	
169783	ATU031723	ATL8C47308:752..1	nap								g4733958	46	153	1.7e-05	(AC007294) unknown protein [Arabi dopsis thaliana]	
169784	ATU031	ATL8C9	nap								g46801	46	1284	2.6e-	(AF111	

169787	ATU031 727	ATL8C4 3920:1 242..1	nap									g45811 64	46	893		nal activa tor CBF1 - like protei n [Arabi dopsis thalia na]
169788	ATU031 728	ATL8S1 7856:1 ..150	nap									g45672 32	46	110	0.0093	(AC006 220) putati ve polypr otein [Arabi dopsis thalia na]
169789	ATU031 729	ATL8C3 9630:1 929..2 792	nap									g34618 22	46	380	6.4e- 37	(AC007 119) putati ve 40S riboso mal protei n S25 [Arabi dopsis thalia na]
																(AC004 138) hypothe tical protei n [Arabi

169790	ATU031 730	ATL8C4 8501:3 587..3 028	nap										g44689 82	46	258	5.9e- 24	dopsis thalia na]
169791	ATU031 731	ATL8C4 1779:2 27..15 22	nap										g32731 01	46	112	4.5e- 05	(Y1761 3) N7 protei n [Medic ago trunca tula]
169792	ATU031 732	ATL8C2 1246:6 78..1	nap										g13518 37	46	609	1.3e- 31	ACETYL - COENZY ME A CARBOX YLASE CARBOX YL TRANSF ERASE SUBUNI T BETA [Brass ica napus]
169793	ATU031 733	ATL8S7 887:1. .182	nap										g18711 79	46	123	1.1e- 06	(U9043 9) FMRFam ide

169794	ATU031 734	ATL8C1 8805:6 32..1	nap										g28322 44	46	755	6.0e- 59	(AF031 569) hypoth etical protei n [Zea mays]	precu sor isolog [Arabi dopsis thalia na]
169795	ATU031 735	ATL8S1 4389:5 45..32 7	nap										g42621 84	46	147	7.3e- 10	(AC005 508) 61760 [Arabi dopsis thalia na]	
169796	ATU031 736	ATL8C4 932:15 25..33 42	nap										g45389 01	46	2327	1.2e- 242	(AL049 482) RNA- direct ed DNA polyme rase- like protei n [Arabi dopsis thalia na]	
169797	ATU031 737	ATL8C2 2745:7 64..16	nap										g42181 20	46	166	2.2e- 11	(AL035 353) Prolin e-rich	

169798	ATU031 738	ATL8S8 179:47 7..1	nap										g10019 55	46	118	5.8e- 12	(U1909 9) unknown protein [Lycop ersicon chilense j]	APG- like protein [Arabi dopsis thaliana]
169799	ATU031 739	ATL8C1 6974:1 ..1219	nap										g30470 68	46	203	1.8e- 19	(AF058 825) simi lar to maize transp oson MuDR (GB:M7 6978) [Arabi dopsis thaliana]	
169800	ATU031 740	ATL8C1 7028:1 284..1	nap										g22450 55	46	1319	6.1e- 133	(Z9734 2) resist ance gene homolog	

169801	ATU031 741	ATL8S3 0229:4 62..1	nap										g49143 59	46	109	1.4e- 05	(AC007 289) hypoth etical protei n [Arabi dopsis thalia na]
169802	ATU031 742	ATL8C4 5945:1 ..779	nap										g28326 36	46	493	1.5e- 46	(AL021 711) hypoth etical protei n [Arabi dopsis thalia na]
169803	ATU031 743	ATL8C4 7475:1 ..921	nap										g38060 98	46	917	1.1e- 99	(AF079 100) argini ne- tRNA- protei n transf erase 1; Atelp [Arabi dopsis thalia na]

169804	ATU031 744	ATL8C1 6991:3 177..1	nap							g42635 44	46	1979	1.4e- 203	na] (AC006 250) putati ve Athila retro ement ORF1 protei n [Arabi dopsis thalia na]
169805	ATU031 745	ATL8C2 8261:7 03..1	nap							g78611 7	46	114	0.26	(L4183 4) nuclea r protei n [Ensis minor]
169806	ATU031 746	ATL8C4 364:10 25..1	nap							g43253 49	46	259	2.2e- 17	(AF128 394) contai ns simila rity to Petuni a PTTA' (GB:AF 009516) [Arabi dopsis thalia na]

169811	ATU031 751	ATL8C1 218:86 13..65 18	nap										g43888 29	46	2357	0.0	etical protei n [Arabi dopsis thalia na] (AC006 528) putati ve pol polypr oteins with a Zn- finger CCHC type domain (prosi te:QDO C50158) and a DDE integr ase signat ure motif [Arabi dopsis thalia na]
169812	ATU031 752	ATL8C2 5649:1 830..2 403	nap										g22136 32	46	453	2.4e- 44	(AC000 103) F21J9. 24 [Arabi dopsis thalia na]

169813	ATU031 753	ATL8C1 3730:1 ..584	nap										g38343 24	46	585	6.4e- 52	na] (AC005 679) Simila r to gb X92 762 tafazz ins protei n from Homo sapien s. [Arabi dopsis thalia na]
169814	ATU031 754	ATL8C2 2384:2 54..11 95	nap										g45126 26	46	371	5.4e- 18	(AC004 793) Simila r to gb Y15 008 M79 protei n (MADS box) from oryza sativa and contai ns SRF transc riptio n factor domain

169815	ATU031 755	ATL8S1 4662:4 71..1	nap										g26215 58	46	105	3.5e- 09	PF1003 19. [Arabi dopsis thalia na] (AE000 832) unknown n [Metha nobact erium thermo autotr ophicu m] TRANSC RIPTIO NAL ACTIVA TOR PROTEI N PFER [Pseud omonas aerugi nosa] (AF105 716) gag protei n [Zea mays] CALCIU M- BINDIN G PROTEI
169816	ATU031 756	ATL8S1 8376:4 17..1	nap										g25007 42	46	84	2.1e- 07	
169817	ATU031 757	ATL8S8 766:62 1..140	nap										g44163 03	46	550	2.0e- 45	
169818	ATU031 758	ATL8C2 3422:2 591..2 872	nap										g11687 82	46	189	2.2e- 08	

169819	ATU031 759	ATL8C5 0026:1 ..396	nap									g10551 96	46	89	0.12	N CAST [Solan um tubero sum] (U4018 7) C. elegan s cuticl e collag en col-8 [Caeno rhabdi tis elegan s]
169820	ATU031 760	ATL8C3 4723:1 856..1 457	nap									g44671 02	46	626	1.0e- 51	(AL035 538) putati ve protei n [Arabi dopsis thalia na]
169821	ATU031 761	ATL8C2 7208:1 ..367	nap									g40278 95	46	120	5.6e- 09	(AF049 352) alpha- expans in precu sor [Nicot iana tabacu m]

169822	ATU031 762	ATL8C1 4027:3 21..38 00	nap									g22449 10	46	747	4.3e- 52	(Z9733 9) unname d protei n produc t [Arabi dopsis thalia nal]
169823	ATU031 763	ATL8C4 0683:2 052..2 403	nap									g38941 89	46	390	2.2e- 31	(AC005 662) hypoth etical protei n [Arabi dopsis thalia nal]
169824	ATU031 764	ATL8C1 63:553 ..1	nap									g43253 63	46	355		(AF128 395) contai ns simila rity to transp osase [Arabi dopsis thalia nal]
169825	ATU031 765	ATL8C3 4600:5 08..1	nap									g46782 70	46	824	4.1e- 83	(AL049 660) protei n kinase

169826	ATU031 766	ATL8C4 089:1. .237	nap									g43888 22	46	123	3.1e- 05	-like protei n [Arabi dopsis thalia na]
169827	ATU031 767	ATL8C4 800:1. .223	nap									g30634 62	46	374	2.3e- 34	(AC003 981) F22O13 .24 [Arabi dopsis thalia na]
169828	ATU031 768	ATL8C3 8025:1 013..2 64	nap									g36953 82	46	403	5.8e- 38	(AF096 370) contai ns simila rity to Arabid opsis thalia na retrot ranspo son Tall-1

169829	ATU031 769	ATL8C2 9778:1 ..637	nap										g40564 33	46	366	1.6e- 40	(GB:L4 7193) [Arabi dopsis thalia na]
169830	ATU031 770	ATL8S6 413:1. .364	nap										g33669 04	46	115		(AF064 647) NADH dehydr ogenas e subuni t F [Brass ica olerac ea]

169851	ATU031 791	ATL8C4 2925:9 1..197 9	nap									g30470 72	46	1565	5.1e- 133	dopsis thalia na] (AF058 825) No defini tion line found [Arabi dopsis thalia na]
169852	ATU031 792	ATL8S1 2770:1 ..545	nap									g13817 37	46	629	1.8e- 60	(U5891 1) lactat e dehydr ogenas e [Neiss eria mening itidis]
169853	ATU031 793	ATL8S2 9256:5 61..1	nap							ATL8S2 9256:5 09..49	1.00	g16512 13	45	544	2.6e- 48	(D8818 9) beta- ketoac yl-ACP syntha se IV [Actin obacil lus actino mycete mcomit ans]

169854	ATU031 794	ATL8S2 7163:5 32..1	nap							g24599 64	46	230	5.4e- 21	(AF010 189) HisX [Pseudomonas stutzeri]
169855	ATU031 795	ATL8C3 9355:1 ..662	nap							g40334 31	46	565	1.9e- 56	PROBAB LE PYRUVATE KINASE , CYTOSOLIC ISOZYME (PK) [Arabidopsis thaliana]
169856	ATU031 796	ATL8S7 358:56 6..1	nap							g43357 41	46	557	2.0e- 33	(AC006 248) putative reverse transcriptase [Arabidopsis thaliana]
169857	ATU031 797	ATL8S1 7556:2 69..1	nap							g11652 7	46	93	0.0011	PROBAB LE CLPP-LIKE PROTEASE

169858	ATU031 798	ATL8C2 4036:1 ..862	nap										g22136 01	46	840	2.2e- 86	(AC000 348) T7N9.2 1 [Arabi dopsis thalia na]	(ENDOP EPTIDA SE CLP) (ORF 196) [Nicot iana tabacu m]
169859	ATU031 799	ATL8C8 831:16 03..23 28	nap										g38597 75	46	235	1.9e- 14	(Z5432 8) putati ve aminop eptida se p [Schiz osacch aromyc es pombel]	
169860	ATU031 800	ATL8C3 3344:3 828..2 400	nap										g44328 02	46	1667	2.0e- 163	(AC006 437) putati ve pol polypr otein, 5' partia l [Arabi	

169861	ATU031 801	ATL8C1 6346:2 053..1	nap										g30212 70	46	240	9.7e- 13	(AL022 347) serine /threo nine kinase -like protei n [Arabi dopsis thalia na]
169862	ATU031 802	ATL8C2 7953:7 30..1	nap										g38735 50	46	93		(AL033 534) serine -rich protei n [Schiz osacch aromyc es pombe]
169863	ATU031 803	ATL8C3 9515:4 66..1	nap										g32490 90	46	651	3.0e- 64	(AC004 473) Contai ns simila rity to CUC2 protei n gb 194 4131 from

169864	ATU031 804	ATL8S2 2752:4 90..1	nap										g29834 07	46	175	2.9e- 12	(AE000 711) peptid e chain releas e factor RF-1 [Aquif ex aeolic us]	A. thalia na. [Arabi dopsis thalia na]
169865	ATU031 805	ATL8C3 798:19 0..599	nap										g25065 52	45	256	5.5e- 23	TRANSC RIPTIO NAL ACTIVA TOR PROTEI N NHAR [Esche richia coli]	
169866	ATU031 806	ATL8C3 6134:9 80..1	nap										g17070 07	45	570	1.1e- 56	(U7872 1) hypoth etical protei n [Arabi dopsis thalia na]	

169867	ATU031 807	ATL8C1 9645:5 40..11 01	nap			ATL8C1 9645:5 50..87 6	0.98	g41159 13	45	142	5.8e- 15	(AF118 222) contai ns simila rity to Iron/A scorba te family of oxidor educta ses (Pfam: PF0067 1, Score= 307.1, E=2.2e -88, N=1) [Arabi dopsis thalia na]
169868	ATU031 808	ATL8C2 92:1.. 754	nap			ATL8C2 92:25.. .754	0.98	g45126 31	45	221	3.4e- 22	(AC004 793) Contai ns simila rity to [Arabi dopsis thalia na]
169869	ATU031 809	ATL8S9 75:523	nap			ATL8S9 75:208	0.98	g42622 10	45	243	8.2e- 38	(AC006 161)

169870	ATU031 810	..1	nap				..83	0.98				g38059 62	45	877	8.6e- 87	simila r to leucin e zipper transc ription factor [Arabi dopsis thalia na]
	ATL8C3 5949:6 85..19 62						ATL8C3 5949:9 09..17 53									(Y1377 2) laccas e [Popul us balsam ifera subsp. tricho carpal]
169871	ATU031 811	ATL8C1 565:14 08..1	nap				ATL8C1 565:13 35..84	0.97				g41159 20	45	1163	3.0e- 103	(AF118 222) simila r to the subtil ase family of serine protea ses (Pfam: PF0008 2, score;

169872	ATU031 812	ATL8C3 3756:1 242..1	nap					ATL8C3 3756:8 28..22 7	0.96	g34514 63	45	247	1.7e- 18	(AL031 349) hypoth etical protei n [Schiz osacch aromyc es pombel]
169873	ATU031 813	ATL8C2 3897:1 011..1	nap					ATL8C2 3897:1 011..2 06	0.96	g44551 99	45	280	3.3e- 24	(AL035 440) putati ve protei n [Arabi dopsis thalia na]
169874	ATU031 814	ATL8C1 7980:2 010..1 704	nap					ATL8C1 7980:2 010..1 759	0.96	g33866 14	45	177	(AC004 665) putati ve transc riptio n factor SF3 [Arabi dopsis	

169875	ATU031 815	ATL8C1 847:15 50..1	nap				ATL8C1 847:14 83..20	0.95	g15728 19	45	333	2.1e- 26	thalia na] (U7085 5) simila r to the RAS gene family [Caeno rhabdi tis elegan s]
169876	ATU031 816	ATL8S1 6330:4 36..1	nap				ATL8S1 6330:4 36..48	0.94	g48366 70	45	268	2.6e- 29	(AF130 736) nuclea r distri bution protei n C homolo g [Homo sapien s]
169877	ATU031 817	ATL8C4 2480:5 45..1	nap				ATL8C4 2480:2 36..74	0.94	g45858 84	45	144	8.7e- 14	(AC005 850) Hypoth etical protei n [Arabi dopsis thalia na]
169878	ATU031 818	ATL8C7 627:1.	nap				ATL8C7 627:20	0.93	g21911 95	45	602	2.0e- 34	(AF007 271)

169879	ATU031 819	ATL8C2 5101:8 7..973	nap				5..808	0.93	g31281 86	45	98	0.0002 1	containing similarity to T. cruzi 3' end fragment (PID:g 161956) [Arabidopsis thaliana na]
169880	ATU031 820	ATL8C1 7630:1 797..9 4	nap				ATL8C1 7630:1 563..9 4	0.93	g36500 38	45	1461	2.4e- 127	(AC005 396) hypothetical protein [Arabidopsis thaliana na]
169881	ATU031 821	ATL8C4 7164:1 46..69 6	nap				ATL8C4 7164:1 46..69 6	0.93	g16521 34	45	118	9.3e- 08	(D9090 3) FKBP- type

169882	ATU031 822	ATL8S2 7176:1 ..183	nap						ATL8S2 7176:1 47..14 4	0.93	g47321 16	45	193	1.6e- 14	peptidyl- prolyl- cis- trans isomer ase [Synec hocyst is sp.] (AF129 072) beta- galact osidas e [Cloni ng vector pWD42- 09]
169883	ATU031 823	ATL8C3 08:879 ..1317	nap						ATL8C3 08:879 ..1264	0.92	g42204 77	45	251	1.5e- 24	(AC006 069) unknow n protei n [Arabi dopsis thalia na]
169884	ATU031 824	ATL8S7 203:32 ..359	nap						ATL8S7 203:46 ..345	0.92	g43214 01	45	192	8.5e- 19	(AF047 353) LIM domain protei n PLIM-2 [Helia

169885	ATU031 825	ATL8S2 4228:4 87..1	nap				ATL8S2 4228:3 59..60	0.92	g30896 12	45	285	1.4e- 27	(AF086 791) pyruva te dehydr ogenas e alpha subuni t [Zymom onas mobili s]
169886	ATU031 826	ATL8S7 91:347 ..1	nap				ATL8S7 91:313 ..24	0.91	g45824 55	45	168	2.1e- 15	(AC007 071) putati ve recept or protei n kinase [Arabi dopsis thalia na]
169887	ATU031 827	ATL8C2 8193:1 551..1	nap				ATL8C2 8193:1 476..3 91	0.91	g43888 34	45	1136	1.2e- 115	(AC006 528) putati ve diseas e resist ance protei n

169888	ATU031 828	ATL8C4 9916:1 724..3 61	nap					ATL8C4 9916:1 490..3 61	0.91		g22449 63	45	596	1.3e- 57	RPPI, 3' partia l [Arabi dopsis thalia na]
															(Z9734 0) hypoth etical protei n [Arabi dopsis thalia na]
169889	ATU031 829	ATL8C4 1997:1 959..4 339	nap					ATL8C4 1997:1 959..4 016	0.91		g45570 72	45	2836	1.8e- 258	(AC007 045) putati ve mudrA transp osase protei n [Arabi dopsis thalia na]
															(AC007 045) putati ve mudrA transp osase protei n [Arabi dopsis thalia na]
169890	ATU031 830	ATL8S2 4266:1 ..530	nap					ATL8S2 4266:5 6..513	0.91		g73117 6	45	180	4.4e- 17	PUTATI VE XYLOSE REPRES SOR [therm ophilic bacter
															PUTATI VE XYLOSE REPRES SOR [therm ophilic bacter

169891	ATU031 831	ATL8C1 062:1. .944	nap					ATL8C1 062:63 ..849	0.89	g45389 04	45	760	9.0e- 70	ium RT8.B4]
169892	ATU031 832	ATL8C9 524:74 5..1	nap					ATL8C9 524:64 5..8	0.89	g30468 15	45	809	4.2e- 77	(AL021 687) cytoch rome P450 [Arabi dopsis thalia na]
169893	ATU031 833	ATL8C2 6984:1 ..1302	nap					ATL8C2 6984:4 6..914	0.89	g33554 73	45	1480	8.8e- 137	(AC004 218) hypoth etical protei n [Arabi dopsis thalia na]
169894	ATU031 834	ATL8C7 770:10 21..28 58	nap					ATL8C7 770:27 05..14 32	0.88	g27087 51	45	292	1.5e- 26	(AC003 952) hypoth etical protei n [Arabi

169895	ATU031 835	ATL8S1 610:42 3..1	nap				ATL8S1 610:22 6..36	0.88	g45126 86	45	358	4.5e- 37	dopsis thalia nal (AC006 931) hypoth etical protei n [Arabi dopsis thalia nal]
169896	ATU031 836	ATL8C3 212:13 08..58 8	nap				ATL8C3 212:12 40..66 9	0.88	g48503 69	45	889	1.9e- 92	(AB027 151) threon ine syntha se [Arabi dopsis thalia nal]
169897	ATU031 837	ATL8C1 0625:1 ..2184	nap				ATL8C1 0625:7 3..212 6	0.87	g47580 32	45	787		coatom er protei n comple x, subuni t beta 2 (beta prime) [Homo. sapien s]
169898	ATU031 838	ATL8C2 1392:1 ..859	nap				ATL8C2 1392:2 07..85	0.86	g44671 17	45	599	4.1e- 37	(AL035 538) hypoth

169899	ATU031 839	ATL8C1 7355:1 534..1	nap					9	ATL8C1 7355:1 420..1 99	0.86		g43888 34	45	1132	1.6e- 118	etical protei n [Arabi dopsis thalia nal] (AC006 528) putati ve diseas e resist ance protei n RPP1, 3', partia l [Arabi dopsis thalia nal]
169900	ATU031 840	ATL8C8 98:533 7..1	nap						ATL8C8 98:450 2..151 6	0.85		g26529 38	45	292	4.4e- 11	(Z4755 4) orf [Zea mays]
169901	ATU031 841	ATL8C1 6584:1 338..7 46	nap						ATL8C1 6584:9 82..74 6	0.85		g42180 04	45	378	1.5e- 37	(AC006 135) putati ve homeod omain protei n [Arabi dopsis thalia

169902	ATU031 842	ATL8C2 8330:6 80..1	nap				ATL8C2 8330:6 80..10 2	0.84	g47739 03	45	382	8.6e- 41	na] (AF074 021) putati ve transp oson protei n [Arabi dopsis thalia na]
169903	ATU031 843	ATL8C1 9571:1 ..407	nap				ATL8C1 9571:1 45..39 9	0.84	g22816 63	45	248	6.4e- 23	(AF007 381) glidin g motili ty protei n [Flavo bacter ium johnso niae]
169904	ATU031 844	ATL8S2 8148:5 64..1	nap				ATL8S2 8148:4 01..30 0	0.83	g30804 46	45	144	3.0e- 07	(AL022 605) puativ e protei n [Arabi dopsis thalia na]
169905	ATU031 845	ATL8S4 353:1. .659	nap				ATL8S4 353:79 ..627	0.83	g24999 41	45	605	1.2e- 60	AMIDOP HOSPHO RIBOSY LTRANS

169906	ATU031 846	ATL8C1 164:10 53..1	nap						0.83	947578 80	45	262	1.4e- 20	BUB3 (buddi ng uninhi bited by benzim idazol es 3, yeast) homolo g [Homo sapien s]
169907	ATU031 847	ATL8C4 2945:3 2..108 6	nap						0.82	942204 60	45	481	3.6e- 39	(AC006 216) Simila r to [Arabi

169908	ATU031 848	ATL8C4 841:70 7..119	nap					ATL8C4 841:52 9..168	0.82	g31231 65	45	260	1.5e- 22	dopsis thalia na]
169909	ATU031 849	ATL8C2 4126:1 179..1	nap					ATL8C2 4126:4 43..20 5	0.82	g22135 83	45	212	9.6e- 18	(AC000 348) T7N9.3 [Arabi dopsis thalia na]
169910	ATU031 850	ATL8S3 318:57 3..1	nap					ATL8S3 318:56 7..64	0.82	g27078 99	45	622	3.5e- 60	(AF038 380) FtsA [Pseud omonas putida]
169911	ATU031 851	ATL8C3 4602:1 272..1	nap					ATL8C3 4602:1 163..2 19	0.82	g29147 09	45	751	5.7e- 58	(AC003 974) hypoth etical protei n [Arabi dopsis thalia na]
169912	ATU031 852	ATL8C5 992:76 4..243	nap					ATL8C5 992:71 2..243	0.81	g45593 36	45	480		(AC007 087) putati ve serine /threo

169913	ATU031 853	ATL8S5 788:53 8..1	nap					ATL8S5 788:44 9..16	0.81	g15497 5	45	518	4.9e- 35	nine protei n kinase [Arabi dopsis thalia nal] (M2204 1) citrat e utiliz ation protei n B [Trans poson Tn3411]
169914	ATU031 854	ATL8C2 6290:1 748..2 9	nap					ATL8C2 6290:6 92..29	0.80	g28646 13	45	717	1.0e- 76	(AL021 811) S- recept or kinase -like protei n [Arabi dopsis thalia nal]
169915	ATU031 855	ATL8C1 7633:1 942..3 686	nap					ATL8C1 7633:1 942..3 655	0.79	g28298 87	45	1356	1.0e- 146	(AC002 396) Hypoth etical protei n [Arabi

169916	ATU031 856	ATL8C2 0097:1 ..838	nap					ATL8C2 0097:4 4..838	0.79	g37860 14	45	679		dopsis thalia na]
169917	ATU031 857	ATL8C1 2048:5 83..18 6	nap					ATL8C1 2048:5 32..21 2	0.78	g16661 48	45	362	3.3e- 28	(AC005 499) hypoth etical protei n [Arabi dopsis thalia na]
169918	ATU031 858	ATL8C2 7972:2 563..1	nap					ATL8C2 7972:2 515..1 444	0.78	g22752 06	45	158		(Z8145 1) rbsK [Mycob acteri um tuberc ulosis]
169919	ATU031 859	ATL8C4 0509:1 ..799	nap					ATL8C4 0509:6 50..77 5	0.78	g35517 42	45	140	2.1e- 16	(AC002 337) pectin estera se isolog [Arabi dopsis thalia na]
														(U2711 2) HT- 1080 protei n [Homo sapien s]

169920	ATU031 860	ATL8C3 215:12 68..12 4	nap				ATL8C3 215:78 6..305	0.77	g47739 08	45	1585	2.2e- 155	(AF147 259) No defini tion line found [Arabi dopsis thalia na]
169921	ATU031 861	ATL8C3 6869:1 ..560	nap				ATL8C3 6869:5 15..37 7	0.77	g24081 03	45	96	2.7e- 08	(AJ001 587) sid3 [Schiz osacch aromyc es pombe]
169922	ATU031 862	ATL8C3 6882:1 ..1935	nap				ATL8C3 6882:2 13..10 61	0.77	g29807 79	45	1251	2.4e- 98	(AL022 198) putati ve protei n [Arabi dopsis thalia na]
169923	ATU031 863	ATL8C4 2645:1 ..1063	nap				ATL8C4 2645:2 96..10 21	0.76	g73218 9	45	232	8.3e- 22	HYPOTH ETICAL 49.1 KD PROTEI N IN SSB2- SPX18 INTERG ENIC REGION

169924	ATU031 864	ATL8C1 4060:1 805..1	nap					ATL8C1 4060:1 739..5 5	0.76	g42638 22	45	792	3.8e- 67	[Sacch aromyc es cerevi siae] (AC006 067) putati ve recept or protei n kinase [Arabi dopsis thalia na]
169925	ATU031 865	ATL8C1 5635:4 28..28 72	nap					ATL8C1 5635:4 28..28 72	0.75	g36953 87	45	1155	9.7e- 95	(AF096 371) contai ns simila rity to repl ic ation protei n A1 [Arabi dopsis thalia na]
169926	ATU031 866	ATL8C1 0205:1 ..1286	nap					ATL8C1 0205:2 02..98 7	0.75	g13620 03	45	606		protei n phosph atase 2A B regula tory

169927	ATU031 867	ATL8C1 1382:1 04..13 36	nap					ATL8C1 1382:1 20..78 0	0.75	g14028 78	45	335	5.8e- 17	Chain 55K - Arabid opsis thalia na [Arabi dopsis thalia na]
169928	ATU031 868	ATL8S2 2560:5 12..1	nap					ATL8S2 2560:3 89..28	0.75	g34022 55	45	236	9.6e- 22	(X9813 0) unknow n [Arabi dopsis thalia na] (AL031 184) tRNA (5- methyl aminom ethyl- 2- thiour idylat e) - methyl transf erase [Strep tomyce s coelic olor]
169929	ATU031 869	ATL8C1 628:74 6..1	nap					ATL8C1 628:73 7..382	0.75	g18902 81	45	409	2.8e- 37	(U8998 4) transf

169930	ATU031 870	ATL8S1 8993:1 ..400	nap					ATL8S1 8993:3 93..11 4	0.75	g10728 13	45	333	3.3e- 25	ormati on- sensit ive protei n homolo g [Acant hamoeb a castel lanii]
169931	ATU031 871	ATL8S1 8557:5 47..1	nap					ATL8S1 8557:4 88..21	0.75	g16539 48	45	260	4.7e- 20	capsid protei n VPI - foot- and- mouth diseas e virus Asia (strai n Asia 1 63/72) [Foot- and- mouth diseas e virus] (D9091 7) hypoth etical protei n

169932	ATU031 872	ATL8C3 0081:9 53..23 1	nap					ATL8C3 0081:8 84..23 1	0.74	g33193 71	45	1140	2.9e- 109	[Synec hocyst is sp.] (AF077 409) Simila r to pectin esterase; T24M8. 6 [Arabi dopsis thalia na]
169933	ATU031 873	ATL8C4 9390:9 91..1	nap					ATL8C4 9390:6 67..78	0.73	g32978 19	45	518	2.1e- 53	(AL031 032) protei n kinase -like protei n [Arabi dopsis thalia na]
169934	ATU031 874	ATL8C3 7362:3 98..14 15	nap					ATL8C3 7362:4 04..13 06	0.72	g48855 79	45	189	protei n involv ed in sexual develo pment [Homo sapien s]	(AL035)
169935	ATU031	ATL8C4	nap					ATL8C4	0.72	g44552	45	1454	1.7e-	(AL035)

169936	875	6064:1 ..1282						6064:5 4..128 2	59				155	523) putati ve Ser/Th r protei n kinase [Arabi dopsis thalia na]
	ATU031 876	ATL8S1 193:59 6..1	nap					ATL8S1 193:41 4..82	0.72			326	1.3e- 20	(AC004 681) unknow n protei n [Arabi dopsis thalia na]
169937	ATU031 877	ATL8C4 7084:8 641..3 010	nap					ATL8C4 7084:8 641..3 010	0.72			175	2.4e- 24	(AC002 521) hypoth etical protei n [Arabi dopsis thalia na]
169938	ATU031 878	ATL8C1 6001:1 ..786	nap					ATL8C1 6001:4 70..78 6	0.71			658	3.6e- 54	(AC005 824) hypoth etical protei n [Arabi dopsis thalia na]

169939	ATU031 879	ATL8C1 3204:1 ..1683	nap				ATL8C1 3204:1 46..16 83	0.71	g45812 03	45	1316	9.0e- 133	thalia na] (Y1791 2) cyclic nucleo tide and calmod ulin- regula ted ion channe l [Arabi dopsis thalia na].
169940	ATU031 880	ATL8C4 2159:2 30..90 4	nap				ATL8C4 2159:2 67..78 2	0.71	g42637 04	45	145	3.3e- 05	(AC006 223) putati ve sugar starva tion- induce d protei n [Arabi dopsis thalia na].
169941	ATU031 881	ATL8S2 9897:1 ..414	nap				ATL8S2 9897:3 0..414	0.70	g30250 50	45	250	4.2e- 21	HYPOTH ETICAL 22.1 KD PROTEI N IN

169942	ATU031 882	ATL8C5 163:11 33..1	nap					ATL8C5 163:90 3..9	0.69	g18144 24	45	533	5.3e- 58	(U8525 4) homeod omain protei n AHDP [Arabi dopsis thalia na]	PYRD- UUP INTERG ENIC REGION [Esche richia coli]
169943	ATU031 883	ATL8C3 5938:1 435..1	nap					ATL8C3 5938:1 420..3 90	0.69	g27656 67	45	357	3.5e- 29	(Z8331 2) 3'(2') ,5'- bispho sphate nucleo tidase [Arabi dopsis thalia na]	
169944	ATU031 884	ATL8C2 3466:1 ..2049	nap					ATL8C2 3466:3 53..16 60	0.69	g43357 20	45	2268	1.1e- 238	(AC006 248) putati ve revers e transc riptas e Tal- 1	

169945	ATU031 885	ATL8C3 5572:1 121..1	nap					ATL8C3 5572:1 038..3 63	0.68	g23427 30	45	878	5.0e- 63	[Arabi dopsis thalia na] (AC002 341) hypoth etical protei n [Arabi dopsis thalia na]
169946	ATU031 886	ATL8C2 9646:7 55..12 7	nap					ATL8C2 9646:6 66..15 0	0.68	g28326 77	45	365	1.6e- 30	[AL021 712) hypoth etical protei n [Arabi dopsis thalia na]
169947	ATU031 887	ATL8C4 2949:2 227..2 91	nap					ATL8C4 2949:2 227..3 34	0.68	g11754 95, g40035 0	45, 43	273, 306	4.8e- 27, 3.6e- 29	HYPOTH ETICAL 105.6 KD PROTEI N C16C9. 06C IN CHROMO SOME I []; NAM7 PROTEI N (NONSE NSE-

169948	ATU031 888	ATL8S1 8803:1 ..553	nap						0.67	g28324 15	45	563	1.0e- 41	(AJ002 489) AmtB [Rhizo bium etil]	MEDIAT ED MRNA DECAY PROTEI N 1) (UP- FRAMES HIFT SUPPRE SSOR 1) [Sacch aromyc es cerevi siae]
169949	ATU031 889	ATL8C1 324:42 74..53 60	nap						0.67	g42638 30	45	1170	2.2e- 87	(AC006 067) hypoth etical protei n [Arabi dopsis thalia na]	
169950	ATU031 890	ATL8S2 1536:7 13..1	nap						0.67	g11769 88	45	398	5.7e- 44	IOLD PROTEI N [Bacil lus subtil is]	

169951	ATU031 891	ATL8C5 000:1. .2003	nap			ATL8C5 000:30 ..1967	0.67	g42001 65, g21911 70	45, 30	1209, 70	4.4e- 128, 0.0008 6	(Y1626 2) neutra l invert ase [Daucu s carota]; (AF007 270) A_IG00 2P16.4 gene produc t [Arabi dopsis thalia na]
169952	ATU031 892	ATL8C1 0463:1 ..1001	nap			ATL8C1 0463:1 00..86 9	0.66	g13455 02	45	606		(X5729 7) TNP2 [Antir rhinum majus]
169953	ATU031 893	ATL8S1 049:56 7..1	nap			ATL8S1 049:43 6..35	0.66	g47551 99	45	214	1.0e- 22	(AC007 018) hypoth etical protei n [Arabi dopsis thalia na]
169954	ATU031 894	ATL8S2 1296:1 ..540	nap			ATL8S2 1296:1 58..53	0.65	g38735 46	45	491	1.5e- 48	(AL033 534) acetyl

169958	ATU031 898	ATL8S2 5904:1 ..545	nap					ATL8S2 5904:7 6..526	0.63	g28335 57	45	371	1.1e- 29	-like protei n [Oryza longis tamina ta] ACETYL ORNITH INE AMINOT RANSFE RASE (ACOAT) [Metha nococc us jannas chiil]
169959	ATU031 899	ATL8C2 8555:8 59..1	nap					ATL8C2 8555:7 64..10	0.63	g49143 32	45	1090	5.1e- 108	(AC005 489) F14N23 .18 [Arabi dopsis thalia na]
169960	ATU031 900	ATL8C3 6221:1 ..2494	nap					ATL8C3 6221:4 60..23 04	0.62	g45443 72	45	2700	5.0e- 285	(AC006 920) putati ve revers e transc riptas e [Arabi dopsis thalia

169961	ATU031 901	ATL8C1 0875:2 224..2 847	nap				ATL8C1 0875:2 498..2 399	0.61	g22752 09	45	712	4.6e- 38	na] (AC002 337) FCA gamma isolog [Arabi dopsis thalia na]
169962	ATU031 902	ATL8S1 2517:2 48..1	nap				ATL8S1 2517:2 02..51	0.59	g22136 10	45	95	3.0e- 08	(AC000 103) F21J9. 4 [Arabi dopsis thalia na]
169963	ATU031 903	ATL8C3 0249:5 77..1	nap				ATL8C3 0249:4 72..77	0.59	g36953 84	45	78	6.7e- 07	(AF096 370) contai ns simila rity to the helix- loop- helix DNA- bindin g domain (Pfam: PF0001 0 HLH, E- value: 0.0046) [Arabi

169964	ATU031 904	ATL8C3 750:65 2..21	nap					ATL8C3 750:36 4..63	0.59	g46782 80	45	839	8.1e- 87	dopsis thalia na] (AL049 660) zinc finger -like protei n [Arabi dopsis thalia na]
169965	ATU031 905	ATL8C2 2816:7 38..20 8	nap					ATL8C2 2816:6 91..21 4	0.59	g46785 86	45	310	2.4e- 34	(AJ132 438) GA 2- oxidas e [Phase olus coccin eus]
169966	ATU031 906	ATL8C1 9516:2 417..3 13	nap					ATL8C1 9516:2 417..3 96	0.58	g48951 72	45	294	4.0e- 30	(AC007 662) hypoth etical protei n [Arabi dopsis thalia na]
169967	ATU031 907	ATL8C2 8044:5 09..1	nap					ATL8C2 8044:5 09..65	0.58	g23157 3	45	368	1.5e- 38	L- ASPARA GINASE (L- ASPARA GINE AMIDOH

169968	ATU031 908	ATL8C4 2539:1 ..1491	nap					ATL8C4 2539:1 47..10 15	0.57	g22451 17	45	838	6.1e- 58	(Z9734 3) hypoth etical protei n [Arabi dopsis thalia na]	YDROLA SE) [Lupin us angust ifolius]
169969	ATU031 909	ATL8C3 9108:1 ..635	nap					ATL8C3 9108:1 76..63 5	0.57	g40384 81	45	204	3.2e- 22	(AL021 713) DNA bindin g-like protei n [Arabi dopsis thalia na]	
169970	ATU031 910	ATL8C4 449:23 76..50 74	nap					ATL8C4 449:23 76..49 51	0.56	g23885 86	45	652	2.5e- 62	(AC000 098) Simila r to Saccha romyce s RAD16 (gb X7 8993). [Arabi dopsis]	

169971	ATU031 911	ATL8C2 9761:9 34..1	nap				ATL8C2 9761:8 55..74 2	0.54	g37860 08	45	125	5.0e- 10	thalia nal (AC005 499) unknown n protei n [Arabi dopsis thalia nal]
169972	ATU031 912	ATL8C4 6174:1 ..1607	nap				ATL8C4 6174:1 51..15 69	0.53	g44552 94	45	840	5.2e- 85	(AL035 528) putati ve protei n [Arabi dopsis thalia nal]
169973	ATU031 913	ATL8C2 6962:1 226..1	nap				ATL8C2 6962:1 071..4 64	0.53	g46783 27	45	732	1.9e- 73	(AL049 658) putati ve cyclic nucleo tide- gated channe l [Arabi dopsis thalia nal]
169974	ATU031 914	ATL8S1 9498:1 ..439	nap				ATL8S1 9498:7 9..439	0.52	g11728 02	45	319	4.4e- 27	QUINON E OXIDOR EDUCTA

169975	ATU031 915	ATL8C2 9957:3 49..11 60	nap				ATL8C2 9957:6 10..11 13	0.52	g42180 10	45	959	2.1e- 96	SE (NADPH :QUINO NE REDUCT ASE) [Pseud omonas aerugi nosaj (AC006 135) putati ve sugar transp orter [Arabi dopsis thalia nal
169976	ATU031 916	ATL8C6 303:10 43..17 46	nap				ATL8C6 303:11 94..16 59	0.51	g31933 32	45	613	4.8e- 64	(AF069 299) simila r to Arabid opsis AT- hook protei n 1 (GB:AJ 222585) [Arabi dopsis thalia nal
169977	ATU031 917	ATL8S2 5756:1	nap				ATL8S2 5756:9	0.51	g35818 51	45	353	9.0e- 32	(AL031 541)

169978	ATU031 918	..517	nap					5..424	0.51	g32618 23	45	214	8.9e- 18	putati v@ two- compon ent sensor [Strep tomyce s coelic olor] (Z9755 9) cysS2 [Mycob acteri um tuberc ulosis]
169979	ATU031 919	ATL8S9 141:57 6..1	nap					ATL8C1 8639:2 146..9 91	0.50	g40380 62	45	861	8.6e- 88	(AC005 897) putati ve transp oson MuDR [Arabi dopsis thalia na]
169980	ATU031 920	ATL8C6 948:15 1..549	nap					ATL8C6 948:15 9..521	0.50	g30470 62	45	498	5.2e- 52	(AF058 825) No defini tion line found [Arabi dopsis

169981	ATU031 921	ATL8C1 1182:7 223..8 883	nap				ATL8C1 1182:7 223..8 830	0.49		g42630 60	45	1419	3.4e- 144	thalia nal (AC005 142) putati ve transp oson protei n [Arabi dopsis thalia nal]
169982	ATU031 922	ATL8C7 226:1. .1099	nap				ATL8C7 226:18 4..104 9	0.49		g14028 78	45	361	1.4e- 18	(X9813 0) unknow n [Arabi dopsis thalia nal]
169983	ATU031 923	ATL8C4 8550:2 4..114 8	nap				ATL8C4 8550:7 17..96 6	0.49		g48503 84	45	383	9.3e- 39	(AC007 357) F3F19. 3 [Arabi dopsis thalia nal]
169984	ATU031 924	ATL8C3 3045:1 ..665	nap				ATL8C3 3045:7 9..327	0.48		g32016 34	45	805	1.3e- 59	(AC004 669) putati ve serine /threo nine protei n kinase

169985	ATU031 925	ATL8C2 5151:1 812..1	nap				ATL8C2 5151:4 08..43	0.48	g43357 37	45	347	6.0e- 20	[Arabi dopsis thalia na] (AC006 248) putati ve serine /threo nine kinase [Arabi dopsis thalia na]
169986	ATU031 926	ATL8S9 987:1. .514	nap				ATL8S9 987:84 ..508	0.47	g32582 82	45	157	1.8e- 15	(AP000 007) 381aa long hypoth etical protei n [Pyroc occus horiko shii]
169987	ATU031 927	ATL8C3 6353:3 76..1	nap				ATL8C3 6353:2 02..42	0.46	g48952 24	45	161	5.4e- 16	(AC007 660) putati ve revers e transc riptas e [Arabi dopsis thalia

169988	ATU031 928	ATL8C4 0278:1 037..4 1	nap				ATL8C4 0278:5 35..43	0.46	g45444 12	45	351	4.4e- 38	na] (AC006 955) hypoth etical protei n [Arabi dopsis thalia na]
169989	ATU031 929	ATL8C3 4613:1 033..1	nap				ATL8C3 4613:9 34..17 2	0.45	g35102 58	45	1292	4.8e- 105	(AC005 310) hypoth etical protei n [Arabi dopsis thalia na]
169990	ATU031 930	ATL8C2 0809:2 812..5 227	nap				ATL8C2 0809:4 425..5 171	0.45	g42042 95	45	191	1.6e- 11	(AC003 027) 1cl pr t_seq No defini tion line found [Arabi dopsis thalia na]
169991	ATU031 931	ATL8S2 3175:4 13..1	nap				ATL8S2 3175:4 04..27	0.44	g16847 82	45	115	4.3e- 05	(U7641 8) putati ve integr al

169992	ATU031 932	ATL8C3 0621:1 .807	nap				ATL8C3 0621:3 16..77 9	0.42	g42042 79	45	834	1.2e- 85	membrane protein [Neisseria gonorrhoeae] (AC004 146) Hypothetical protein [Arabidopsis thaliana]
169993	ATU031 933	ATL8C2 788:80 1..137 3	nap				ATL8C2 788:99 2..128 5	0.41	g33278 52	45	421	2.4e- 42	(AB009 683) S glycoprotein [Raphanus sativus]
169994	ATU031 934	ATL8C2 5788:1 155..2 61	nap				ATL8C2 5788:9 43..26 1	0.41	g10763 65	45	898	5.1e- 95	pectinesterase (EC 3.1.1.11) PME1 precursor - Arabidopsis thaliana [Arabidopsis]

169995	ATU031 935	ATL8C4 727:20 82..1	nap					ATL8C4 727:19 68..40 1	0.40	g34618 40	45	2915	3.2e- 298	thalia na] (AC005 315) putati ve revers e transc riptas e [Arabi dopsis thalia na]
169996	ATU031 936	ATL8C8 707:14 18..1	nap					ATL8C8 707:12 57..37	0.40	g40493 53	45	883	1.9e- 84	(AL034 567) putati ve protei n [Arabi dopsis thalia na]
169997	ATU031 937	ATL8S1 2257:5 97..1	nap							g43143 60	45	145	1.5e- 17	(AC006 340) putati ve MADS- box protei n AGL17 [Arabi dopsis thalia na]
169998	ATU031 938	ATL8C4 9412:8	nap							g29470 60	45	701	6.6e- 62	(AC002 521)

170003	ATU031 943	ATL8S2 3579:8 1...530	nap							g18134 67	45	240	2.4e- 17	n [Arabi dopsis thalia na]
														(U6116 8) 4- hydrox ybenzo ate octapr enyltr ansfer ase [Bacil lus firmus]
170004	ATU031 944	ATL8C2 9893:7 91...1	nap							g47387 4	45	110	0.33	(U0828 5) a membra ne- associ ated salt- induci ble protei n [Nicot iana tabacu m]
170005	ATU031 945	ATL8C6 200:38 3...1	nap							g27393 87	45	104	0.0007 8	(AC002 505) hypoth etical protei n [Arabi

170006	ATU031 946	ATL8C4 3254:1 ..239	nap								g42630 59	45	377	9.3e- 36	dopsis thalia nal (AC005 142) hypoth etical protei n [Arabi dopsis thalia nal]
170007	ATU031 947	ATL8S3 827:1. .245	nap								g48369 00	45	131	0.021	(AC007 369) Unknow n protei n [Arabi dopsis thalia nal]
170008	ATU031 948	ATL8C1 2232:1 ..1199	nap								g30333 79	45	210	2.3e- 18	(AC004 238) putati ve DNA- bindin g protei n [Arabi dopsis thalia nal]
170009	ATU031 949	ATL8C3 747:1. .2187	nap								g22448 02	45	2448	8.1e- 242	(Z9733 6) retrov irus-

170010	ATU031 950	ATL8C1 4585:1 043..5 81	nap							g37898 32	45	386	4.8e- 40	(AF061 414) CAULIF LOWER [Arabi dopsis thalia na]	related polypr oteins homolo gous [Arabi dopsis thalia na]
170011	ATU031 951	ATL8S2 33:65. .647	nap							g45672 93	45	662	4.2e- 61	(AC006 918) putati ve Athila retro element ORF1 protei n [Arabi dopsis thalia na]	related polypr oteins homolo gous [Arabi dopsis thalia na]
170012	ATU031 952	ATL8C1 4625:5 77..1	nap							g13343 94	45	900	1.1e- 84	(X5578 6) ORF126 9 [Beta vulgar is]	related polypr oteins homolo gous [Arabi dopsis thalia na]
170013	ATU031	ATL8S3	nap						ATL8S3	g16201	44	120	1.1e-	(U4258)	related polypr oteins homolo gous [Arabi dopsis thalia na]

170014	ATU031 954	ATL8S9 858:1. .559	nap						g11870 8	45	272	8.2e- 32	CHROMO SOMAL REPLIC ATION INITIA TOR PROTEI N DNAA [Prote us mirabi lis]
170015	ATU031 955	ATL8C3 1724:1 158..2 826	nap						g38943 87	45	395	3.2e- 31	(AF053 995) Hcr2- OB [Lycop ersico n escule ntum]
170016	ATU031 956	ATL8C3 0561:8 51..16 0	nap						g31282 07	45	152	5.9e- 12	(AC004 077) hypoth etical protei n [Arabi dopsis thalia na]
170017	ATU031 957	ATL8C1 6678:1 ..2566	nap						g42635 44	45	2275	6.3e- 220	(AC006 250) putati ve Athila retro element ORF1 protei

170025	ATU031 965	ATL8C2 5302:5 67..1	nap										g26186 92	45	815	9.9e- 82	(AC002 510) putati ve zinc- finger protei n [Arabi dopsis thalia na]
170026	ATU031 966	ATL8C4 6712:1 ..501	nap										g21601 76	45	351	1.7e- 36	(AC000 132) F21M12 .25 gene produc t [Arabi dopsis thalia na]
170027	ATU031 967	ATL8C4 7112:1 ..1151	nap										g46782 80	45	643	3.2e- 69	(AL049 660) zinc finger -like protei n [Arabi dopsis thalia na]

170032	ATU031 972	ATL8C3 5049:2 319..1	nap										g43780 66	45	1569	4.8e- 173	(AF098 806) polypr oteins [Sorgh um bicolor r]	PHOSPH ATE KINASE) [Salmo nella typhim urium]
170033	ATU031 973	ATL8C1 9919:4 18..14 89	nap										g45444 60	45	315	5.7e- 28	(AC006 592) putati ve revers e transc riptas e [Arabi dopsis thalia nal]	
170034	ATU031 974	ATL8C1 8574:9 74..17 8	nap										g33675 18	45	1377	5.1e- 140	(AC004 392) Strong simila rity to unknow n protei n T28M21	

170037	ATU031 977	ATL8C8 713:17 87..1	nap							g42063 06	45	2418	2.1e- 219	na] (AF049 110) prpol [Zea mays]
170038	ATU031 978	ATL8C2 8470:1 ..1594	nap							g40380 37, g48369 17	45, 42	588, 737	5.6e- 60, 4.4e- 74	(AC005 936) hypoth etical protei n [Arabi dopsis thalia na]; (AC007 153) 80099 [Arabi dopsis thalia na]
170039	ATU031 979	ATL8C2 4052:1 ..787	nap							g45394 60	45	283	1.6e- 29	(AL049 500) putati ve protei n [Arabi dopsis thalia na]
170040	ATU031 980	ATL8C3 6623:1 ..534	nap							g49144 01	45	200	1.5e- 14	(AL050 352) hypoth etical protei n [Arabi

170045	ATU031 985	ATL8C5 113:1. .461	nap									g17857 02	45	198	7.8e- 07	(Y0850 1) orf199 [Arabi dopsis thalia nal	tion line found [Caeno rhabdi tis elegan s]
170046	ATU031 986	ATL8C1 2763:1 ..534	nap									g48357 67	45	437	4.6e- 43	(AC007 202) T8K14. 16 [Arabi dopsis thalia nal	
170047	ATU031 987	ATL8S2 293:1. .377	nap									g11971 2	45	103	0.048	EXTENS IN PRECUR SOR (PROLI NE- RICH GLYCOP ROTEIN) [Zea mays]	
170048	ATU031 988	ATL8C3 208:1. .334	nap									g48951 72	45	325	2.2e- 32	(AC007 662) hypothe tical protei	

170049	ATU031 989	ATL8C4 9964:1 ..932	nap									45	848	1.3e- 97	n [Arabi dopsis thalia nal] (AL049 488) putati ve protei n [Arabi dopsis thalia nal]
170050	ATU031 990	ATL8C8 691:11 09..1	nap									45	841	1.4e- 86	(AF111 709) polypr oteins [Oryza sativa subsp. indica]
170051	ATU031 991	ATL8C4 027:65 51..59 42	nap									45	887	3.0e- 90	(AC006 918) putati ve pol ypr oteins [Arabi dopsis thalia nal]
170052	ATU031 992	ATL8S2 7919:1 ..349	nap									45	262	5.8e- 22	(AF064 654) NADH dehydr ogenase

170053	ATU031 993	ATL8S2 7104:5 64..1	nap									g42636 46	45	634	5.7e- 61	(AC006 136) putati ve TA1- like revers e transc riptas e [Arabi dopsis thalia na]
170054	ATU031 994	ATL8C4 4571:7 26..25 17	nap									g42063 06	45	907	2.7e- 89	(AF049 110) prpol [Zea mays]
170055	ATU031 995	ATL8C4 0021:1 001..1	nap									g35823 28	45	677	1.4e- 68	(AC005 496) hypoth etical protei n [Arabi dopsis thalia na]
170056	ATU031 996	ATL8C1 823:13 82..1	nap									g45859 36	45	907	2.2e- 116	(AC007 211) putati ve

170057	ATU031 997	ATL8C3 3279:1 605..1 390	nap									g45593 86	45	283	1.2e- 25	helica se [Arabi dopsis thalia na] (AC006 526) putati ve polyga lactur onase [Arabi dopsis thalia na]
170058	ATU031 998	ATL8C1 5223:1 950..6 78	nap									g41153 63	45	1357	6.9e- 131	(AC005 957) putati ve diseas e resist ance protei n [Arabi dopsis thalia na]
170059	ATU031 999	ATL8C2 8929:4 58..71 4	nap									g32041 08	45	177	1.8e- 10	(AJ006 764) putati ve deoxyc ytidyl ate deamin ase

170063	ATU032 003	ATL8C3 9408:5 75..1	nap									g42205 37	45	818	2.6e- 83	na] (AL035 356) PsRT17 -1 like protei n [Arabi dopsis thalia na]
170064	ATU032 004	ATL8C3 5300:1 54..13 03	nap									g91314 0	45	1849	5.8e- 186	ARK2 produc t/rece ptor- like serine /threo nine protei n kinase ARK2 [Arabi dopsis thalia na, Columb ia, Peptid e, 850 aa]
170065	ATU032 005	ATL8S8 948:52 5..76	nap									g42204 71	45	266	1.6e- 26	(AC006 069) recept or- like kinase [Arabi

170070	ATU032 010	ATL8C4 804:39 80..1	nap										g27603 31	45	432	2.7e- 19	(AC002 130) F1N21. 16 [Arabi dopsis thalia na]
170071	ATU032 011	ATL8C1 433:1. .1409	nap										g33778 16	45	1413	3.8e- 128	(AF076 275) contai ns simila rity to Arabid opsis thalia na retrot ranspo son Athila (GB:X8 1801) [Arabi dopsis thalia na]
170072	ATU032 012	ATL8C2 137:1. .953	nap										g41159 21	45	1484	7.4e- 150	(AF118 222) F3H7.4 gene

170074	ATU032 014	ATL8C2 4204:9 24..1	nap							g31932 94	45	1172	1.2e- 106	gene. [Arabi dopsis thalia na] (AF069 298) simila r to revers e transc riptas es (Pfam: rvt.hm m, score: 53.76) [Arabi dopsis thalia na]
170075	ATU032 015	ATL8C3 1837:1 029..1	nap							g43253 49	45	261	1.8e- 18	(AF128 394) contai ns simila rity to Petuni a PTTA' (GB:AF 009516) [Arabi dopsis thalia na]

170080	ATU032 020	ATL8C8 970:67 5..1	nap				ATL8C8 970:49 3..71	0.98	g45103 43	44	661	5.3e- 69	ekil] (AC006 921) hypoth etical protei n [Arabi dopsis thalia na]
170081	ATU032 021	ATL8C2 4937:8 73..1	nap				ATL8C2 4937:3 85..70	0.98	g35496 56	44	601	6.2e- 49	(AL031 394) putati ve protei n [Arabi dopsis thalia na]
170082	ATU032 022	ATL8S6 737:48 0..1	nap				ATL8S6 737:47 6..25	0.98	g12729 8	44	384		PHOSPH O-N- ACETYL MURAMO YL- PENTAP EPTIDE - TRANSF ERASE (UDP- MURNAC - PENTAP EPTIDE PHOSPH OTRANS FERASE)

170083	ATU032 023	ATL8C4 1331:1 ..996	nap					ATL8C4 1331:3 05..59 4	0.97	g46789 47	44	119	4.8e- 10	[Esche richia coli] (AL049 711) putati ve protei n [Arabi dopsis thalia na]
170084	ATU032 024	ATL8S9 875:1. .565	nap					ATL8S9 875:84 ..548	0.96	g48205 2	44	284	6.5e- 22	hypoth etical protei n - Escher ichia coli [Esche richia coli]
170085	ATU032 025	ATL8S1 8147:1 ..452	nap					ATL8S1 8147:1 4..439	0.96	g26488 29	44	132	1.8e- 09	(AE000 984) DNA ligase , putati ve [Archa eoglob us fulgid us]
170086	ATU032 026	ATL8C3 8288:1 02..85 8	nap					ATL8C3 8288:1 02..77 8	0.95	g14028 78	44	532	3.2e- 56	(X9813 0) unknow n [Arabi

170087	ATU032 027	ATL8S6 633:1. .577	nap				ATL8S6 633:16 1..548	0.95	g39157 67	44	288	UDP-N- ACETYL MURAMA TE-- ALANIN E LIGASE (UDP- N- ACETYL MURANO YL-L- ALANIN E SYNTH E TASE) [Porph yromon as gingiv alis]
170088	ATU032 028	ATL8C3 5667:9 46..1	nap				ATL8C3 5667:9 46..42 0	0.95	g31842 89	44	473	1.1e- 28 (AC004 136) hypoth etical protei n [Arabi dopsis thalia na]
170089	ATU032 029	ATL8C2 8469:1 ..789	nap				ATL8C2 8469:3 19..68 1	0.95	g36000 30	44	360	1.2e- 35 (AF080 119) contai ns simila rity

170093	ATU032 033	ATL8C3 0300:1 84..14 00	nap						48	ATL8C3 0300:1 84..13 08	0.93	g54203 6	44	154	3.5e- 13	ve acyl coenzy me A oxidas e, peroxi somal compon ent [Arabi dopsis thalia na]
170094	ATU032 034	ATL8S1 5865:4 11..1	nap							ATL8S1 5865:3 41..21	0.93	g38854 80	44	86	0.0087	TDR8 protei n - tomato [Lycop ersico n escule ntum] (AF063 588) enoyl CoA hydrat ase [Rhodo coccus fascia ns]
170095	ATU032 035	ATL8S2 9808:5 37..1	nap							ATL8S2 9808:4 76..41	0.92	g21329 23	44	220	1.2e- 22	probab le membra ne protei n YOR240

170096	ATU032 036	ATL8C3 3894:1 ..402	nap						ATL8C3 3894:2 77..40 2	0.92	g34510 67	44	308			w - yeast (Sacch aromyc es cerevi siae) [Sacch aromyc es cerevi siae] (AL031 326) putati ve protei n [Arabi dopsis thalia na]
170097	ATU032 037	ATL8C2 5126:2 10..11 59	nap						ATL8C2 5126:2 10..37 4	0.92	g36435 93	44	114	0.46		(AC005 395) hypoth etical protei n [Arabi dopsis thalia na]
170098	ATU032 038	ATL8S1 4708:4 46..1	nap						ATL8S1 4708:4 46..11 7	0.92	g47538 57	44	165	2.2e- 13		(AL049 754) putati ve ABC transp orter ATP- bindin

170099	ATU032 039	ATL8C2 4455:1 ..2976	nap						0.92		ATL8C2 4455:1 30..29 36		g13516 42, g46589 8	44, 33	249, 266	5.4e- 23, 2.9e- 22	g protei n [Strep tomyce s coelic olor]
170100	ATU032 040	ATL8C1 0405:1 ..1316	nap						0.91		ATL8C1 0405:1 86..13 16		g47578 80	44	272		HYPOTH ETICAL HELICA SE C8A4.0 8C IN CHROMO SOME I [Schiz osacch aromyc es pombe] ; HYPOTH ETICAL HELICA SE K12H4. 8 IN CHROMO SOME III [Caeno rhabdi tis elegan s]
																	BUB3 (buddi ng uninhi

170101	ATU032 041	ATL8C2 6478:6 77..1	nap						0.90	g95725 1	44	393	2.4e- 16	(S7741 8) oxidor educta se requir ed for shoot apex develo pment= FEY [Arabi dopsis thalia na]	bited by benzim idazol es 3, yeast) homolo g [Homo sapien s]
170102	ATU032 042	ATL8S2 4632:1 ..524	nap						0.90	g23146 88	44	241	1.6e- 19	(AE000 649) conser ved hypoth etical ATP- bindin g protei n [Helic obacte	

170103	ATU032 043	ATL8C7 769:26 30..1	nap					ATL8C7 769:26 30..14 92	0.90	g43887 30	44	453	6.7e- 43	r pylori 26695] (AC006 413) hypoth etical protei n [Arabi dopsis thalia na]
170104	ATU032 044	ATL8C4 3566:3 680..1 285	nap					ATL8C4 3566:3 496..2 771	0.90	g28092 46	44	524		(AC002 560) F2401. 15 [Arabi dopsis thalia na]
170105	ATU032 045	ATL8C1 2558:1 ..1412	nap					ATL8C1 2558:7 0..139 2	0.89	g30804 26	44	497	2.5e- 49	(AL022 604) putati ve protei n [Arabi dopsis thalia na]
170106	ATU032 046	ATL8C4 5320:2 365..1	nap					ATL8C4 5320:2 345..5 54	0.89	g42638 25	44	2122	2.5e- 223	(AC006 067) hypoth etical protei n [Arabi dopsis thalia

170107	ATU032 047	ATL8C4 3990:1 281..1 64	nap				ATL8C4 3990:1 161..1 64	0.89	g45586 85	44	563	na] (AC006 586) putati ve TNP1 protei n of the Taml transp oson of Antirr hinum majus [Arabi dopsis thalia na]
170108	ATU032 048	ATL8S3 79:587 ..1	nap				ATL8S3 79:537 ..77	0.89	g24154 03	44	325	1.5e- 25 (AF015 775) acetyl orniti ne deacet ylase [Bacil lus subtil is]
170109	ATU032 049	ATL8C5 883:48 6..1	nap				ATL8C5 883:48 6..94	0.89	g13701 84	44	189	(Z7394 1) RAB7B [Lotus japoni cus]
170110	ATU032 050	ATL8C1 8159:1 236..1	nap				ATL8C1 8159:1 168..1	0.89	g32427 17	44	238	(AC003 040) putati

								41							ve APG protei n [Arabi dopsis thalia na]
170111	ATU032 051	ATL8C6 203:21 07..1	nap					ATL8C6 203:20 32..26	0.88	g45859 72	44	1715	9.0e- 181	(AC005 287) Putati ve ATPase [Arabi dopsis thalia na]	
170112	ATU032 052	ATL8C3 3959:4 51..14 45	nap					ATL8C3 3959:4 51..13 43	0.88	g29247 78	44	803	6.8e- 83	(AC002 334) putati ve polyga lactur onase [Arabi dopsis thalia na]	
170113	ATU032 053	ATL8C2 7343:3 38..99 2	nap					ATL8C2 7343:3 41..99 2	0.88	g34829 75	44	370		(AL031 369) putati ve protei n [Arabi dopsis thalia na]	
170114	ATU032 054	ATL8C3 7472:2 026..1	nap					ATL8C3 7472:1 970..2	0.88	g30932 94	44	1305		(Y1278 2) putati	

170115	ATU032 055	ATL8C3 3992:7 04..1	nap					00		0.88	g42040 95	44	430		ve villin [Arabi dopsis thalia na]
170116	ATU032 056	ATL8C3 2721:1 86..46 0	nap					ATL8C3 2721:1 86..32 3		0.87	g46894 51	44	108	0.68	(AF030 260) CYP94A 1 [Vicia sativa]
170117	ATU032 057	ATL8S6 263:64 1..1	nap					ATL8S6 263:30 7..229		0.86	g32928 20	44	164		(AL031 018) putati ve MADS Box / AGL protei n [Arabi dopsis thalia na]
170118	ATU032 058	ATL8C4 140:28 7..188 8	nap					ATL8C4 140:69 0..188 8		0.85	g46894 73	44	996	1.7e- 94	(AC007 213) putati ve

170119	ATU032 059	ATL8C2 369:96 1..283	nap						ATL8C2 369:78 0..283	0.85	g13529 38	44	92	3.2e- 06	HYPOTH ETICAL 39.7 KD PROTEI N IN HOM6- PMT4 INTERG ENIC REGION [Sacch aromyc es cerevi siae]
170120	ATU032 060	ATL8C1 448:1. .1091	nap						ATL8C1 448:76 ..901	0.85	g40380 32	44	955	1.8e- 65	(AC005 936) hypoth etical protei n [Arabi dopsis thalia na]
170121	ATU032 061	ATL8S2 1541:4 57..1	nap						ATL8S2 1541:4 49..8	0.84	g79733 6	44	384	3.2e- 35	(U1962 0) MocA [Agrob acteri

170122	ATU032 062	ATL8C6 597:52 2..1	nap					ATL8C6 597:26 9..61	0.84	g48952 00	44	185	1.1e- 19	um tumefa ciens] (AC007 661) putati ve serine /threo nine protei n kinase [Arabi dopsis thalia na]
170123	ATU032 063	ATL8C1 1278:1 ..2644	nap					ATL8C1 1278:2 14..26 23	0.84	g13451 32	44	907	1.4e- 43	(U4702 9) ERECTA [Arabi dopsis thalia na]
170124	ATU032 064	ATL8S5 946:52 8..1	nap					ATL8S5 946:39 7..173	0.81	g41159 49	44	441	6.7e- 29	(AF118 223) contai ns simila rity to adenos ine deamin ases [Arabi dopsis thalia na]
170125	ATU032	ATL8C3	nap					ATL8C3	0.81	g35401	44	775		(AC004

	065	7419:5 31..21 33				7419:5 31..19 47	88						122) Hypothetical protein [Arabidopsis thaliana]
170126	ATU032 066	ATL8C3 6584:1 863..1	nap			ATL8C3 6584:1 805..1 2	0.81 g45389 28, g45389 27	44, 37	518, 545	9.3e-43, 2.2e-55	(AL049 483) putative protein [Arabidopsis thaliana]; (AL049 483) putative peroxidase [Arabidopsis thaliana]		
170127	ATU032 067	ATL8C5 06:1.. 1136	nap			ATL8C5 06:262 ..411	0.79 g45812 07	44	1322	1.9e-128	(Y1791 4) cyclic nucleotide and calmodulin-regulated ion		

170128	ATU032 068	ATL8C1 2198:8 89..1	nap				ATL8C1 2198:8 13..26	0.78	g14028 78	44	603	2.1e- 54	(X9813 0) unknown [Arabi dopsis thalia na]
170129	ATU032 069	ATL8C1 5834:4 88..1	nap				ATL8C1 5834:4 88..11	0.77	g42404 25	44	61	0.0003 1	(AF080 235) Lank [Strep tomyce s cyanog enus]
170130	ATU032 070	ATL8S1 6874:4 8..692	nap				ATL8S1 6874:4 8..560	0.77	g11769 26	44	210	2.4e- 22	HYPOTH ETICAL 47.3 KD PROTEI N IN THCA 5'REGI ON (ORF3) [Rhodo coccus erythr opolis]
170131	ATU032 071	ATL8C6 263:11 5..920	nap				ATL8C6 263:19 0..845	0.77	g42042 90	44	851	1.4e- 83	(AC003 027) lcl pr

170132	ATU032 072	ATL8C3 171:26 3..163 4	nap					ATL8C3 171:26 4..152 3	0.76	g24973 66	44	103	1.7e- 05	INTERF ERON- GAMMA INDUCI BLE PROTEI N MG11 [Mus muscul us]	t_seq No defini tion line found [Arabi dopsis thalia na]
170133	ATU032 073	ATL8S2 6461:3 56..11	nap					ATL8S2 6461:1 77..11	0.76	g38830 83	44	106		(AF074 611) unknow n [Yersi nia pestis]	
170134	ATU032 074	ATL8C3 09:135 6..1	nap					ATL8C3 09:118 1..105 0	0.75	g32585 73	44	89	3.6e- 09	(U8995 9) Hypoth etical protei n [Arabi dopsis thalia na]	
170135	ATU032 075	ATL8C4 5337:8	nap					ATL8C4 5337:8	0.74	g45672 96	44	1004	3.7e- 84	(AC006 918)	

170136	ATU032 076	38..1	nap				38..16	0.74	g32506 76	44	268	1.2e- 35	putati ve Athila retroeo lement ORF1 protei n [Arabi dopsis thalia na]
		ATL8C1 7660:1 266..2 30					ATL8C1 7660:1 243..3 60						(AL024 486) putati ve protei n [Arabi dopsis thalia na]
170137	ATU032 077	ATL8C3 5834:1 ..2577	nap				ATL8C3 5834:8 2..254 6	0.74	g45396 60	44	1240	2.2e- 201	(AF061 282) polypr otein [Sorgh um bicolo r]
170138	ATU032 078	ATL8C4 2897:1 ..2301	nap				ATL8C4 2897:6 2..227 6	0.73	g40637 58	44	1277	2.9e- 88	(AC005 561) hypoth etical protei n [Arabi dopsis thalia na]

170139	ATU032 079	ATL8C2 0512:1 ..1382	nap				ATL8C2 0512:1 78..13 49	0.73	g10017 08	44	472	2.2e- 31	(D6400 4) Nifs [Synec hocyst is sp.]
170140	ATU032 080	ATL8C3 9274:1 029..1	nap				ATL8C3 9274:1 029..3 14	0.73	g36000 30	44	516	2.0e- 31	(AF080 119) contai ns simila rity to ankyri n repeat s (Pfam: ank.hm m, score: 13.93, 14.93 and 27.78) [Arabi dopsis thalia na]
170141	ATU032 081	ATL8C4 5193:1 ..416	nap				ATL8C4 5193:1 64..40 6	0.72	g21911 96	44	638	1.5e- 64	(AF007 271) contai ns a MADS domain [Arabi dopsis thalia na]

170142	ATU032 082	ATL8C1 4486:6 85..10	nap				ATL8C1 4486:6 25..10	0.71	g31766 83	44	1005	1.3e- 72	(AC003 671) F1707. 12 [Arabi dopsis thalia nal]
170143	ATU032 083	ATL8S2 0464:1 ..579	nap				ATL8S2 0464:3 04..29 0	0.71	g41560 71	44	383	9.6e- 23	(AE001 567) NA(+)/ H(+) ANTIPO RTER 1 [Helic obacte r pylori J99]
170144	ATU032 084	ATL8C3 693:55 2..438 7	nap				ATL8C3 693:55 2..227 3, ATL8C3 693:27 04..41 01	0.70, 0.52	g40637 60	44	1129	1.6e- 86	(AC005 561) putati ve POL3 protei n [Arabi dopsis thalia nal]
170145	ATU032 085	ATL8C3 7512:1 ..2572	nap				ATL8C3 7512:2 50..25 55	0.70	g43143 58	44	486		(AC006 340) putati ve kinesi n heavy chain protei n

170146	ATU032 086	ATL8C4 8112:1 404..1	nap						ATL8C4 8112:1 307..9 99	0.70	g42630 60	44	477	1.5e- 51	[Arabi dopsis thalia na] (AC005 142) putati ve transp oson protei n [Arabi dopsis thalia na]
170147	ATU032 087	ATL8C5 397:1. .1506	nap						ATL8C5 397:11 3..150 6	0.70	g12796 02	44	297	1.1e- 26	(Z7175 4) pectin methyl estera se [Nicot iana plumba ginifo lia]
170148	ATU032 088	ATL8C2 1874:9 87..34 10	nap						ATL8C2 1874:9 87..28 96	0.69	g31766 91	44	258	3.3e- 25	(AC003 671) Contai ns homolo gy to serine /threo nine protei n kinase gb X99

170151	ATU032 091	ATL8C8 28:1.. 1353	nap				ATL8C8 28:184 ..679	0.69	g11971 4	44	103	0.71	[Arabi dopsis thalia na] EXTENS IN PRECUR SOR (CELL WALL HYDROX YPROLI NE- RICH GLYCOP ROTEIN) [Nicot iana tabacu m]
170152	ATU032 092	ATL8C2 2551:1 ..967	nap				ATL8C2 2551:1 1..879	0.69	g35823 28	44	793	7.2e- 74	(AC005 496) hypoth etical protei n [Arabi dopsis thalia na]
170153	ATU032 093	ATL8C3 5540:1 ..1209	nap				ATL8C3 5540:4 18..11 08	0.68	g28276 30	44	505	5.9e- 54	(AL021 636) putati ve protei n [Arabi dopsis thalia na]

170154	ATU032 094	ATL8C2 378:1. .709	nap				ATL8C2 378:72 ..322	0.68	g31281 69	44	670	5.6e- 72	na] (AC004 521) hypoth etical protei n [Arabi dopsis thalia na]
170155	ATU032 095	ATL8C4 2667:1 097..1	nap				ATL8C4 2667:9 18..21 4	0.67	g42103 22	44	766	1.4e- 88	(AJ132 544) D1- proces sing protea se [Arabi dopsis thalia na]
170156	ATU032 096	ATL8C1 357:11 41..24 1	nap				ATL8C1 357:11 41..25 0	0.67	g45585 64	44	640	2.3e- 59	(AC007 138) predic ted protei n of unknow n functi on [Arabi dopsis thalia na]
170157	ATU032 097	ATL8S5 865:1. .352	nap				ATL8S5 865:98 ..347	0.67	g32531 98	44	234	6.2e- 20	(AF029 714) PhaB [Pseud

170158	ATU032 098	ATL8C4 3299:2 06..17 77	nap					ATL8C4 3299:2 57..13 04	0.66	g46894 73	44	935		omonas putida J (AC007 213) putati ve recept or protei n kinase [Arabi dopsis thalia na]
170159	ATU032 099	ATL8C1 0060:3 94..1	nap					ATL8C1 0060:3 67..59	0.66	g38609. 46	44	148	1.7e- 14	(AJ235 271) PENICI LLIN- BINDIN G PROTEI N DACF PRECUR SOR (dacF) [Ricke ttsia prowaz ekil]
170160	ATU032 100	ATL8C4 2238:7 94..45 7	nap					ATL8C4 2238:6 87..45 7	0.66	g38941 68	44	125	2.1e- 13	(AC005 312) simila r to phloem - specif ic lectin

170161	ATU032 101	ATL8C3 2271:8 22..50 9	nap				ATL8C3 2271:7 73..52 2	0.65	g22449 80	44	303	7.9e- 23	[Arabi dopsis thalia na] (Z9734 0) simila rity to myrosi nase- associ ated protei n - Brassi ca [Arabi dopsis thalia na]
170162	ATU032 102	ATL8C2 5133:1 871..1 513	nap				ATL8C2 5133:1 815..1 513	0.64	g41033 20	44	203	1.6e- 18	(AF022 231) unknow n protei n [Homo sapien s]
170163	ATU032 103	ATL8C3 5291:1 ..672	nap				ATL8C3 5291:1 76..67 2	0.64	g33554 80	44	249	1.5e- 14	(AC004 218) Medica go noduli n N21- like protei n [Arabi

170164	ATU032 104	ATL8S2 1053:1 ..464	nap					ATL8S2 1053:3 65..17 5	0.64	g29826 35	44	214	2.0e- 12	dopsis thalia nal (Y1288 4) pyruva te dehydr ogenas e alpha2 subuni t [Zymom onas mobili s]
170165	ATU032 105	ATL8C4 3954:1 ..846	nap					ATL8C4 3954:2 91..50 7	0.64	g44328 01	44	247		(AC006 437) unknow n protei n [Arabi dopsis thalia nal]
170166	ATU032 106	ATL8C1 280:58 4..51	nap					ATL8C1 280:49 6..161	0.63	g45859 95	44	355	8.1e- 31	(AC005 287) Hypoth etical protei n [Arabi dopsis thalia nal]
170167	ATU032 107	ATL8C9 364:1. .1820	nap					ATL8C9 364:55 4..181	0.63	g40111 4	44	1747	2.3e- 162	SUCROS E- PHOSPH

170168	ATU032 108	ATL8S9 452:67 2..1	nap				6		0.63		g43097 36	44	136	1.4e- 11	ATE SYNTHA SE (UDP- GLUCOS E- FRUCTO SE- PHOSPH ATE GLUCOS YLTRAN SFERAS E) [Zea mays]
170169	ATU032 109	ATL8S4 346:1. .509	nap					ATL8S4 346:96 ..379	0.61		g43253 78	44	759	3.9e- 76	(AF128 396) simila r to phosph ate transp orters [Arabi dopsis thalia na]
170170	ATU032 110	ATL8C3 6416:1	nap					ATL8C3 6416:1	0.61		g22449 63	44	689	7.2e- 70	(Z9734 0)

170171	ATU032 111	565..1 21	nap				555..1 21	0.61	g31766 59	44	1634	1.6e- 147	(AC004 393) Strong simila rity to recept or kinase gb M80 238 from A. thalia na. [Arabi dopsis thalia na]
170172	ATU032 112	ATL8C7 248:11 65..1	nap				ATL8C7 248:10 67..40	0.61	g33425 56	44	474	1.7e- 33	(AF077 528) import in alpha [Arabi dopsis thalia na]
170173	ATU032 113	ATL8C1 8735:2 174..1	nap				ATL8C1 8735:1 655..5 50	0.61	g45859 85	44	1349	2.1e- 109	(AC005 287) Hypoth etical

170174	ATU032 114	ATL8C4 5529:7 00..18 90	nap				ATL8C4 5529:8 86..16 22	0.61	g23927 64	44	425	7.5e- 30	prote n [Arabi dopsis thalia na]
170175	ATU032 115	ATL8C3 0603:1 ..1929	nap				ATL8C3 0603:4 45..16 02	0.60	g42494 19	44	1592	7.5e- 164	(AC006 072) hypoth etical protei n, 3' partia l [Arabi dopsis thalia na]
170176	ATU032 116	ATL8C3 6011:1 813..8 0	nap				ATL8C3 6011:1 251..1 96	0.60	g45389 01	44	2008	1.1e- 210	(AL049 482) RNA- direct ed DNA polyme rase- like protei n [Arabi dopsis

170177	ATU032 117	ATL8C3 9813:1 ..886	nap					ATL8C3 9813:4 4..838	0.60	g44328 22	44	1113	4.1e- 106	thalia nal (AC006 593) hypoth etical protei n [Arabi dopsis thalia nal]
170178	ATU032 118	ATL8S1 0459:5 37..1	nap					ATL8S1 0459:5 37..64	0.58	g17230 94	44	634	1.4e- 63	PUTATI VE CYTOCH ROME P450 CY50.2 6 [Mycob acteri um tuberc ulosis]
170179	ATU032 119	ATL8C1 2854:1 514..1	nap					ATL8C1 2854:1 466..8	0.58	g48836 12	44	1379	3.5e- 143	(AC006 922) hypoth etical protei n [Arabi dopsis thalia nal]
170180	ATU032 120	ATL8S3 0292:4 72..1	nap					ATL8S3 0292:4 72..20	0.58	g26128 06	44	335	2.2e- 32	(AL008 883) map [Mycob acteri um tuberc ulosis]

170181	ATU032 121	ATL8S1 452:45 3..1	nap					ATL8S1 452:45 1..31	0.57	g48503 82	44	148	3.0e- 12	um tuberc ulosis J (AC007 357) Simila r to gb D38 124 EREBP- 3 from Nicoti ana tabacu m and contai ns PF 008 47 AP2 domain . [Arabi dopsis thalia na]
170182	ATU032 122	ATL8C6 57:159 9..1	nap					ATL8C6 57:142 2..200	0.57	g42630 60	44	1083	6.1e- 103	(AC005 142) putati ve transp oson protei n [Arabi dopsis thalia na]
170183	ATU032 123	ATL8C4 4767:3	nap					ATL8C4 4767:2	0.57	g47739 10,	44, 33	212, 1311	5.6e- 13,	(AF147 259)

170184	ATU032 124	076..1	ATL8C4 4402:1 ..1782	nap					950..1 30	0.57	g49143 61	44	1828	7.7e- 129	No defini tion line found [Arabi dopsis thalia na]; (AF075 598) No defini tion line found [Arabi dopsis thalia na]
170185	ATU032 125	ATL8C4 3909:2 175..3 77	ATL8C4 3909:1 854..3 77	nap					ATL8C4 3909:1 854..3 77	0.57	g47536 55	44	745		(AC007 289) putati ve revers e transc riptas e [Arabi dopsis thalia na] (AL049 751) pectat e lyase like protei

170186	ATU032 126	ATL8C8 957:1. .620	nap					ATL8C8 957:21 4..153	0.56	g81286	44	223	0.0028	n [Arabi dopsis thalia na] extens in - Volvox carter i (fragm ent) [Volvo x carter il]
170187	ATU032 127	ATL8C4 0241:1 ..1161	nap					ATL8C4 0241:6 4..852	0.55	g45394 62	44	303	3.1e- 23	(AL049 500) putati ve protei n [Arabi dopsis thalia na]
170188	ATU032 128	ATL8S1 409:50 4..1	nap					ATL8S1 409:45 3..22	0.55	g12692 3	44	176	3.5e- 16	MICROS OMAL DIPEPT IDASE PRECUR SOR (MDP) (DEHYD ROEPT IDASE- I) (RENAL DIPEPT IDASE)

170189	ATU032 129	ATL8S2 9238:3 58..1	nap					ATL8S2 9238:3 58..8	0.54	g44164 67	44	200	5.2e- 17	(RDP) [Sus scrofa]
170190	ATU032 130	ATL8C1 0627:2 955..1	nap					ATL8C1 0627:2 902..4 7	0.53	g46801 83	44	584		(AF111 709) gag- pol protei n [Oryza sativa subsp. indica]
170191	ATU032 131	ATL8C1 3811:1 ..919	nap					ATL8C1 3811:8 24..91 9	0.51	g86264 4	44	271	3.0e- 33	(U2018 4) MADS- box protei n AGL14 [Arabi dopsis thalia na]
170192	ATU032 132	ATL8S2 3364:4 24..1	nap					ATL8S2 3364:4 24..12	0.51	g26339 19	44	208	2.5e- 19	(Z9911 2) altern ate gene

170193	ATU032 133	ATL8C8 539:70 5..1	nap						0.50	g30333 75	44	801	1.2e- 74	(AC004 238) putati ve berber ine bridge enzyme [Arabi dopsis thalia na]	name: ylml; simila r to hypoth etical protei ns [Bacil lus subtil is]
170194	ATU032 134	ATL8S2 9838:6 03..1	nap						0.49	g41065 74	44	472	1.4e- 40	(AL031 866) ORF 7, len: 456 aa, highly simila r to AF0600 75_3, Myxoco ccus xanthu s sdeAB	

operon																			' atrazine chlorohydrolyase homolog, 36.6% identity in 421 aa overlap, Fastascores opt:891, E():0 [Yersinia pestis]	(AB02176) root cap protein 2 [Zeamays]
170195	ATU032135	ATL8C2 7726:1..1011	nap						ATL8C2 7726:82..927	0.47	g4514637	44	322							(AC002396) Hypothetical protein n [Arabidopsis]
170196	ATU032136	ATL8C4 8718:560..1	nap						ATL8C4 8718:516..67	0.47	g2829881	44	690							4.1e-42

170197	ATU032 137	ATL8C1 5033:1 666..1	nap					ATL8C1 5033:1 666..4 35	0.45	g43143 83	44	78	0.0076	thalia nal (AC006 232) hypoeth etical protein [Arabi dopsis thalia nal]
170198	ATU032. 138	ATL8C3 3760:2 34..24 16	nap					ATL8C3 3760:2 41..17 89, ATL8C3 3760:2 178..2 079	0.44, 0.60	g45811 67	44	800	5.7e- 72	(AC006 220) putative transp oson MuDR protein [Arabi dopsis thalia nal]
170199	ATU032 139	ATL8C2 062:1. .1653	nap					ATL8C2 062:68 ..1438	0.44	g48369 31	44	638	4.7e- 46	(AC006 085) Hypoeth etical protein [Arabi dopsis thalia nal]
170200	ATU032 140	ATL8S3 760:69 0..1	nap					ATL8S3 760:62 2..64	0.44	g12873 1	44	305	5.8e- 15	NADH- PLASTO QUINON E OXIDOR

170201	ATU032 141	ATL8C2 4672:1 ..1325	nap						ATL8C2 4672:9 0..131 6	0.43	g41153 63	44	948	1.1e- 84	EDUCTA SE CHAIN 4, CHLORO PLAST [March antia polymo rpha] (AC005 957) putati ve diseas e resist ance protei n [Arabi dopsis thalia na]
170202	ATU032 142	ATL8C1 9057:3 55..1	nap						ATL8C1 9057:2 99..9	0.42	g39414 14	44	216	2.5e- 23	(AF062 861) putati ve transc riptio n factor [Arabi dopsis thalia na]
170203	ATU032 143	ATL8C1 1669:3 144..1 503	nap						ATL8C1 1669:3 041..1 503	0.42	g37460 69	44	1574	2.2e- 149	(AC005 311) putati ve

170204	ATU032 144	ATL8C1 3213:1 081..1	nap					ATL8C1 3213:9 23..27 9	0.41	g45860 45	44	597	3.7e- 65	(AC007 020) putati ve ankyri n protei n [Arabi dopsis thalia na]
170205	ATU032 145	ATL8C1 5343:5 ..283	nap					ATL8C1 5343:1 92..24 9	0.41	g45859 33	44	218	2.0e- 18	(AC007 211) hypoth etical protei n [Arabi dopsis thalia na]
170206	ATU032 146	ATL8C4 1737:8 9..794	nap					ATL8C4 1737:8 9..371	0.41	g33273 90	44	640	2.2e- 62	(AC004 483) hypoth etical protei n [Arabi dopsis thalia na]

170214	ATU032 154	ATL8S6 034:21 9..125	nap									g22889 87	44	137	1.1e- 11	(AC002 335) hypoth etical protei n [Arabi dopsis thalia na]
170215	ATU032 155	ATL8C1 6962:1 646..1	nap									g42635 22	44	502	1.9e- 56	(AC004 044) hypoth etical protei n [Arabi dopsis thalia na]
170216	ATU032 156	ATL8C1 5234:4 63..1	nap									g44173 07	44	532	3.2e- 51	(AC006 446) putati ve pol ypr otei n [Arabi dopsis thalia na]
170217	ATU032 157	ATL8C6 739:36 68..24 70	nap									g45824 64	44	293	6.0e- 15	(AC007 071) hypoth etical protei n [Arabi dopsis thalia na]

170218	ATU032 158	ATL8C1 0787:5 31..31 8	nap							g19463 63	44	158	0.0038	(U9321 5) glycin e-rich protei n isolog [Arabi dopsis thalia na]
170219	ATU032 159	ATL8C2 7322:1 ..802	nap							g22450 15	44	888		(Z9734 1) unname d protei n produc t [Arabi dopsis thalia na]
170220	ATU032 160	ATL8S2 0462:1 ..497	nap							g16661 20	44	192	6.3e- 19	(Z8209 8) ltp2 [Mycob acteri um tuberc ulosis]
170221	ATU032 161	ATL8C1 5110:1 087..1	nap							g45672 69	44	553	1.5e- 41	(AC006 841) unknow n protei n [Arabi dopsis

170222	ATU032 162	ATL8S2 4479:1 ..491	nap					ATL8S2 4479:1 33..48 2	1.00	g98709 0	43	185	3.3e- 18	thalia nal (X8678 0) orfZ [strep tomyce s hygros copicu s]
170223	ATU032 163	ATL8C1 456:55 7..1	nap							g45394 50	44	264	9.2e- 13	(AL049 500) putati ve protei n [Arabi dopsis thalia nal]
170224	ATU032 164	ATL8S2 436:25 4..543	nap							g45389 32	44	415	3.7e- 21	(AL049 483) hypoth etical protei n [Arabi dopsis thalia nal]
170225	ATU032 165	ATL8C4 5410:4 549..1 031	nap							g39133 66	44	573	1.5e- 76	PUTATI VE RECEPT OR PROTEI N KINASE CRINKL Y4

170226	ATU032 166	ATL8C9 085:1. .988	nap										g42638 34	44	451		PRECUR SOR [Zea mays] (AC006 067) hypoth etical protei n [Arabi dopsis thalia na]
170227	ATU032 167	ATL8C2 462:45 8..925	nap										g45859 97	44	388	1.3e- 33	(AC005 287) Hypoth etical protei n [Arabi dopsis thalia na]
170228	ATU032 168	ATL8C1 0938:2 64..22 95	nap										g45396 60	44	1317	1.3e- 121	(AF061 282) polypr oteine [Sorgh um bicolo r]
170229	ATU032 169	ATL8S1 3365:5 14..65	nap										g30333 95	44	329	2.6e- 22	(AC004 238) putati ve zinc- finger protei n

170238	ATU032 178	ATL8S2 5221:6 05..22	nap									g47739 10	44	131	3.8e- 12	(AF147 259) No defini tion line found [Arabi dopsis thalia na]
170239	ATU032 179	ATL8S9 72:1.. 507	nap									g36953 97	44	535	1.4e- 59	(AF096 372) No defini tion line found [Arabi dopsis thalia na]
170240	ATU032 180	ATL8C7 395:76 9..120 8	nap									g44540 32	44	83	0.12	(AL035 394) putati ve protei n [Arabi dopsis thalia na]
170241	ATU032 181	ATL8C2 2038:1 ..766	nap									g23469 88	44	120	1.5e- 08	(AB006 606) ZPT4-4 [Petun ia x hybrid a]
170242	ATU032	ATL8C1	nap									g42635	44	106	1.6e-	(AC004

	182	5608:1 ..863									28				05	044) predic ted protei n of unknow n functi on [Arabi dopsis thalia na]
170243	ATU032 183	ATL8C4 6101:2 412..2 734	nap								g36680 95	44	221	3.2e- 12	(AC004 667) hypoeth etical protei n [Arabi dopsis thalia na]	
170244	ATU032 184	ATL8C3 8072:2 836..4 519	nap								g45394 06	44	2118	5.4e- 203	(AL049 524) putati ve retrot ranspo son [Arabi dopsis thalia na]	
170245	ATU032 185	ATL8C4 7190:1 ..774	nap								g49143 81	44	690	1.5e- 71	(AC007 584) unknow n protei n	

170246	ATU032 186	ATL8C3 0519:1 179..1 409	nap									g47339 58	44	98	1.5e- 05	[Arabi dopsis thalia na] (AC007 294) unknow n protei n [Arabi dopsis thalia na]
170247	ATU032 187	ATL8C2 6870:5 62..13 57	nap									g21905 56	44	713	1.6e- 65	(AC001 229) F5I14. 10 [Arabi dopsis thalia na]
170248	ATU032 188	ATL8C2 2042:1 ..852	nap									g32420 62	44	881	1.6e- 92	(Z9705 8) NRT2;1 p [Arabi dopsis thalia na]
170249	ATU032 189	ATL8S2 2629:2 07..1	nap									g22259 77	44	206	5.0e- 17	(Z9719 3) hypoth etical protei n Rv1883 c [Mycob acteri

170250	ATU032 190	ATL8S2 729:43 9..1	nap									g54847 2	44	193	3.5e- 06	um tuberc ulosis J BETA- LACTAM ASE PRECUR SOR (PENIC ILLINA SE) [Pseud omonas cepaci a]
170251	ATU032 191	ATL8C3 4061:9 17..49 4	nap									g72970 4	44	148	8.8e- 19	DNA- BINDIN G PROTEI N HEXBP (HEXAM ER- BINDIN G PROTEI N) [Leish mania major]
170252	ATU032 192	ATL8C1 2624:3 450..2 097	nap									g45876 18	44	69	0.0009 5	(AC006 951) hypoth etical protei n [Arabi dopsis thalia

[illegible]

170253	ATU032 193	ATL8C2 2080:2 45..46 8	nap							g18091 27	44	166	5.4e- 15	(U7767 4) termin al flower 1 [Arabi dopsis thalia na]
170254	ATU032 194	ATL8S1 1911:3 11..1	nap							g45443 80	44	254	8.6e- 21	(AC006 920) putati ve revers e transc riptas e [Arabi dopsis thalia na]
170255	ATU032 195	ATL8C4 9518:4 88..1	nap							g45899 54	44	274	1.0e- 26	(AC007 169) hypoth etical protei n [Arabi dopsis thalia na]
170256	ATU032 196	ATL8C2 3718:2 761..1 754	nap							g45875 68	44	434	3.6e- 39	(AC006 550) Contai ns PF1006 37

170264	ATU032 204	ATL8S1 8306:7 47..1	nap										g24944 11	44	203	4.7e- 19	etical protei n [Arabi dopsis thalia na]
170265	ATU032 205	ATL8C3 6638:1 204..1 698	nap										g31766 79	44	235	2.1e- 15	(AC003 671) F1707. 8 [Arabi dopsis thalia na]
170266	ATU032 206	ATL8C1 2664:9 1..188 8	nap										g45393 91	44	235	3.5e- 23	(AL035 526) putati ve protei n [Arabi dopsis thalia na]
170267	ATU032 207	ATL8C3 0448:1 2..548	nap										g10015 45	44	116	0.039	(D6400 0) oligop eptide

170270	ATU032, 210	ATL8C2 8859:4 27..1	nap							g45389 69	44	626	1.6e- 61	Pisum sativu m. [Arabi dopsis thalia na]
170271	ATU032 211	ATL8C1 9192:1 ..1126	nap							g46626 45	44	833	3.2e- 76	(AL049 488) putati ve protei n [Arabi dopsis thalia na]
170272	ATU032 212	ATL8C2 3945:1 ..446	nap							g36680 81	44	134	5.0e- 11	(AC004 667) putati ve peptid ase [Arabi dopsis thalia na]
170273	ATU032 213	ATL8C5 0056:2 25..1	nap							g38057 59	44	172	1.9e- 15	(AC005 693) hypoth

170274	ATU032 214	ATL8C4 1395:1 ..771	nap										g33416 84	44	185	7.9e- 21	etical protei n [Arabi dopsis thalia na]
170275	ATU032 215	ATL8C2 1554:7 8..879	nap										g17070 20	44	287	1.9e- 28	(U7872 1) hypoth etical protei n [Arabi dopsis thalia na]
170276	ATU032 216	ATL8S2 9043:4 50..10 1	nap										g21207 35	44	148	8.3e- 12	GumM protei n - Xantho monas campes tris [Xanth omonas campes tris]
170277	ATU032 217	ATL8C4 0294:4	nap										g38343 20	44	198	5.8e- 17	(AC005 679)

170278	ATU032 218	60..99 7	nap										g44544 83	44	439	7.7e- 46	Similar to [Arabi dopsis thalia na]
		ATL8S2 3183:1 ..465															(AC006 234) putati ve kinase , 5, partia l [Arabi dopsis thalia na]
170279	ATU032 219	ATL8C3 7704:3 4..687	nap										g17032 92	44	989	2.1e- 80	HIGH AFFINI TY AMMONI UM TRANSP ORTER [Arabi dopsis thalia na]
170280	ATU032 220	ATL8C4 6434:1 988..3 785	nap										g19463 76	44	187	4.7e- 13	(U9321 5) unknow n protei n [Arabi dopsis thalia na]
170281	ATU032	ATL8C1	nap										g45859	44	336	3.6e-	(AC005

170282	221	5991:1 101..6 25								97								27	287)
	ATU032 222	ATL8S1 5062:5 77..1	nap							g21349 92	44	300						4.3e- 21	Hypothenetical protein [Arabidopsis thaliana]
170283	ATU032 223	ATL8C4 244:60 2..1	nap							g41851 31	44	397						4.0e- 35	deoxyhypusine synthase - human [Homo sapiens] (AC005724) putative zinc finger protein [Arabidopsis thaliana]
170284	ATU032 224	ATL8S1 5019:4 07..1	nap							g22933 07	44	202						4.1e- 17	(AF008220) sugar transporter [Bacillus subtilis]
170285	ATU032	ATL8C3	nap							g27393	44	494						1.0e-	(AC002)

170286	225	1844:2 283:..8 74									73						44		44	505) putati ve flavon ol 3- o- glucos yltran sferas e [Arabi dopsis thalia na]
170287	ATU032 227	ATL8C1 4053:4 962:..6 236	nap								g21296 18	44	1362	5.4e- 116						hypoth etical protei n 1 - Arabid opsis thalia na retrot ranspo son Athila [Arabi dopsis thalia na]
170288	ATU032 228	ATL8S7 860:32 8..1	nap								g42621 75	44	171	1.9e- 10						(AC005 508) 12894 [Arabi dopsis thalia na]
		ATL8C1 855:1. .597	nap								g27393 73	44	497	2.9e- 105						(AC002 505) putati

170292	ATU032 232	ATL8C3 5512:7 57..12 10	nap									g48367 71	44	262	2.4e- 23	m B- type cyclin (GB:D5 0737) [Arabi dopsis thalia na]
																(AF136 579) iron- regula ted transp orter 1 [Lycop ersico n escule ntum]
170293	ATU032 233	ATL8C1 4801:6 91..1	nap									g43888 19	44	1104	2.4e- 112	(AC006 528) putati ve zinc- finger protei n [Arabi dopsis thalia na]
170294	ATU032 234	ATL8C1 0243:2 533..3 043	nap									g38057 63	44	465		(AC005 693) hypoth etical protei n

170295	ATU032 235	ATL8S1 9042:1 ..571	nap					ATL8S1 9042:5 7..558	0.99	g31220 97	43	710	6.3e- 69	[Arabi dopsis thalia na]
170296	ATU032 236	ATL8C4 7556:1 692..4 74	nap					ATL8C4 7556:1 631..6 22	0.99	g33778 16	43	1476	7.6e- 141	(AF076 275) contai ns simila rity to Arabid opsis thalia na retrot ranspo son Athila (GB:X8 1801) [Arabi dopsis thalia na]
170297	ATU032 237	ATL8S2 4677:2 12..1	nap					ATL8S2 4677:1 63..60	0.99	g40380 66	43	74	0.14	(AC005 897) hypo thetical protei

170298	ATU032 238	ATL8C2 2749:1 34..18 06	nap					ATL8C2 2749:1 34..17 63	0.99	g29146 95	43	1112	1.7e- 109	n [Arabi dopsis thalia na] (AC003 974) putati ve ubiqui tin specif ic protea se [Arabi dopsis thalia na]
170299	ATU032 239	ATL8S2 0936:1 ..465	nap					ATL8S2 0936:8 6..465	0.99	g40280 18	43	144	4.5e- 11	(AF074 396) unknown [Desul fotoma culum thermo cister num]
170300	ATU032 240	ATL8C1 7291:1 761..9 49	nap					ATL8C1 7291:1 573..9 49	0.98	g32506 81	43	802	2.7e- 81	(AL024 486) putati ve protei n [Arabi dopsis thalia na]
170301	ATU032	ATL8C1	nap					ATL8C1	0.98	g28296	43	184	1.6e-	HEMK

170302	241	9458:8 28..68					9458:8 03..56 1	11				19	PROTEI N HOMOLO G [Synec hocyst is sp.]
	ATU032 242	ATL8C4 7221:1 ..1353	nap				ATL8C4 7221:3 91..12 99	0.98	g42043 09	43	1155	5.8e- 90	(AC003 027) lcl pr t_seq No defini tion line found [Arabi dopsis thalia na]
170303	ATU032 243	ATL8S1 1213:1 ..744	nap				ATL8S1 1213:9 5..697	0.98	g54438 5	43	694	1.2e- 62	GAMMA- GLUTAM YLTRAN SPEPTI DASE PRECUR SOR [Pseud omonas sp.]
170304	ATU032 244	ATL8S4 487:1. .619	nap				ATL8S4 487:95 ..611	0.98	g17076 46	43	359	1.3e- 28	(X9951 4) oprN [Pseud omonas aerugi nosa]
170305	ATU032 245	ATL8C2 9376:1	nap				ATL8C2 9376:1	0.98	g54966 3	43	73	7.4e- 07	HYPOTH ETICAL

170306	ATU032 246	..1198					25..88 8	0.98	g45593 21	43	461	2.3e- 35	50.3 KD PROTEI N IN TFAL- PAN3 INTERG ENIC REGION [Sacch aromyc es cervi siae]
		ATL8C3 2483:6 93..30	nap				ATL8C3 2483:6 80..30						(AC007 087) hypoth etical protei n [Arabi dopsis thalia na]
170307	ATU032 247	ATL8C3 7655:3 71..15 98	nap				ATL8C3 7655:3 71..94 6	0.98	g20621 54	43	66	4.6e- 06	(AC001 645) hypoth etical protei n [Arabi dopsis thalia na]
170308	ATU032 248	ATL8S8 216:1. .542	nap				ATL8S8 216:12 9..532	0.97	g45859 95	43	176	9.0e- 08	(AC005 287) Hypoth etical protei n

170309	ATU032 249	ATL8C3 3605:1 ..561	nap					ATL8C3 3605:4 21..55 3	0.97		g44172 98	43	264	6.3e- 23	[Arabi dopsis thalia na] (AC007 019) putati ve RAS- relate d protei n RAB7 [Arabi dopsis thalia na]
170310	ATU032 250	ATL8S4 938:1. .623	nap					ATL8S4 938:65 ..579	0.97		g17810 98	43	543	2.8e- 53	(Z8386 4) gltD [Mycob acteri um tuberc ulosis]
170311	ATU032 251	ATL8C2 0246:9 93..1	nap					ATL8C2 0246:9 85..87	0.97		g30045 51	43	686	5.0e- 71	(AC003 673) hypoth etical protei n [Arabi dopsis thalia na]
170312	ATU032 252	ATL8S2 7627:5 44..1	nap					ATL8S2 7627:4 59..57	0.97		g25072 95	43	374	5.0e- 35	HYPOTH ETICAL ADENIN E-

170313	ATU032 253	ATL8C2 759:1. .3052	nap					ATL8C2 759:55 ..2167	0.97		g45811 68	43	2602	4.4e- 278	(AC006 220) hypoth etical protei n [Arabi dopsis thalia na]
170314	ATU032 254	ATL8C4 4968:1 802..1	nap					ATL8C4 4968:1 529..1 1	0.96		g39351 64	43	1554	1.6e- 172	(AC004 557) F17L21 .7 [Arabi dopsis thalia na]
170315	ATU032 255	ATL8C1 9766:2 405..1	nap					ATL8C1 9766:1 370..6 7	0.96		g46462 27	43	1434	1.8e- 133	(AC007 235) hypoth etical protei n [Arabi dopsis thalia na]

170316	ATU032 256	ATL8S1 0708:6 48..28 9	nap			ATL8S1 0708:5 87..30 5	0.95	g46802 12	43	109	2.5e- 06	(AF114 171) hypoth etical protei n [Sorgh um bicolo r]
170317	ATU032 257	ATL8S7 014:1. .437	nap			ATL8S7 014:18 0..437	0.95	g17301 51	43	460	1.7e- 34	GLYCER ALDEHY DE 3- PHOSPH ATE DEHYDR OGENAS E, PLASMI D [Alcal igenes eutrop hus]
170318	ATU032 258	ATL8C1 0471:3 759..4 36	nap			ATL8C1 0471:1 282..4 36	0.95	g41159 19	43	1303		(AF118 222) simila r to the subtil ase family of serine protea ses (Pfam: PF0008 2, score;

170319	ATU032 259	ATL8C4 9304:1 199..1	nap				ATL8C4 9304:1 179..3 4	0.95	g48368 72	43	972	5.4e- 73	47.5, E=3.8e -12, n=2) [Arabi dopsis thalia nal]
170320	ATU032 260	ATL8C3 6586:1 035..5 82	nap				ATL8C3 6586:1 035..5 82	0.95	g42180 06	43	269	6.4e- 16	(AC007 260) lcllpr t_seq No defini tion line found [Arabi dopsis thalia nal]
170321	ATU032 261	ATL8S2 7798:5 82..1	nap				ATL8S2 7798:5 26..26	0.94	g39936 7	43	848	8.7e- 86	(AC006 135) putati ve protei n kinase [Arabi dopsis thalia nal] NADP- SPECIF IC GLUTAM ATE DEHYDR OGENAS E

170322	ATU032 262	ATL8C3 5900:1 894..1 149	nap					ATL8C3 5900:1 556..1 149	0.94	g16539 35	43	129	0.10	(D9091 7) hypoth etical protein [Synec hocyst is sp.]	(NADP- GDH) []
170323	ATU032 263	ATL8C2 3276:1 ..951	nap					ATL8C2 3276:2 87..95 1	0.94	g44067 85	43	95	6.4e- 10	(AC006 532) hypoth etical protein [Arabi dopsis thalia na]	
170324	ATU032 264	ATL8C2 4409:1 667..1 008	nap					ATL8C2 4409:1 603..1 008	0.94	g24649 15	43	1096	2.8e- 86	(Z9970 8) transc riptio n initia tion factor like protein [Arabi dopsis thalia na]	
170325	ATU032 265	ATL8S2 6852:4	nap					ATL8S2 6852:2	0.93	g29841 19	43	345		(AE000 758)	

170326	ATU032 266	82..1	nap				55..24	0.93	g37765 71	43	465	1.5e- 39	(AC005 388) T22H22 .18 [Arabi dopsis thalia na]	peptid e chain releas e factor RF-2 [Aquif ex aeolic us]
170327	ATU032 267	ATL8C2 3262:1 357..1 92	nap				ATL8C2 3262:9 55..19 2	0.93, 0.53	g43143 80, g37383 37	43, 31	112, 822	0.040, 2.4e- 84	(AC006 232) putati ve revers e transc riptas e [Arabi dopsis thalia na]; (AC005 170) putati ve revers e transc riptas	

170328	ATU032 268	ATL8C4 5066:8 44..1	nap					ATL8C4 5066:7 46..97	0.92	g44068 21	43	941	1.8e- 99	e [Arabi dopsis thalia na] (AC006 201) hypoth etical protei n [Arabi dopsis thalia na]
170329	ATU032 269	ATL8C1 7131:2 921..4 00	nap					ATL8C1 7131:2 824..5 55	0.91	g34026 85	43	1329	1.1e- 116	(AC004 697) unknow n protei n [Arabi dopsis thalia na]
170330	ATU032 270	ATL8C3 1514:1 ..2873	nap					ATL8C3 1514:9 4..283 4	0.91	g24400 15	43	2086	2.1e- 185	(AF014 960) multid rug resist ance- associ ated protei n 2; AtMRP2 [Arabi dopsis thalia na]

170331	ATU032 271	ATL8C2 4217:2 796..1	nap				ATL8C2 4217:2 796..2 65	0.91	g46626 44	43	1113	1.2e- 100	(AC006 429) unknown protein [Arabi dopsis thalia na]
170332	ATU032 272	ATL8S6 238:49 4..1	nap				ATL8S6 238:47 3..15	0.91	g16661 37	43	555		(Z8209 8) hypoth etical protein Rv3523 [Mycob acteri um tuberc ulosis]
170333	ATU032 273	ATL8S8 725:52 8..1	nap				ATL8S8 725:34 8..30	0.91	g49143 58	43	235	2.3e- 20	(AC007 289) hypoth etical protein [Arabi dopsis thalia na]
170334	ATU032 274	ATL8C6 075:1. .548	nap				ATL8C6 075:56 ..533	0.91	g11638 5	43	269	5.5e- 23	CHALCO NE SYNTHA SE A (NARIN GENIN- CHALCO

170335	ATU032 275	ATL8C2 5180:1 545..4 1	nap						ATL8C2 5180:1 300..4 1	0.90	g36081 54	43	1002	3.4e- 96	(AC005 314) unknown protein [Arabi dopsis thalia na]	NE SYNTHA SE A) [Petun- ia x hybrid a]
170336	ATU032 276	ATL8C5 892:1. .3066	nap						ATL8C5 892:44 6..306 3	0.90	g33554 65	43	380		(AC004 218) putati- ve Ser/Th r protein kinase [Arabi dopsis thalia na]	(AC004 218) putati- ve Ser/Th r protein kinase [Arabi dopsis thalia na]
170337	ATU032 277	ATL8C4 8404:2 072..1	nap						ATL8C4 8404:1 687..5 1	0.89	g26705 5	43	997	3.3e- 93	SUCROS E SYNTHA SE (SUCRO SE-UDP GLUCOS YLTRAN SFERAS E)	SUCROS E SYNTHA SE (SUCRO SE-UDP GLUCOS YLTRAN SFERAS E)

170338	ATU032 278	ATL8C1 9543:1 118..1	nap				ATL8C1 9543:8 76..21 0	0.89	g17236 65	43	98	4.4e- 06	[Arabi dopsis thalia .na] HYPOTH ETICAL 44.2 KD PROTEI N IN RME1- TFC4 INTERG ENIC REGION [Sacch aromyc es cerevi siae]
170339	ATU032 279	ATL8C3 4931:1 663..1	nap				ATL8C3 4931:1 441..1 83	0.89	g46782 93	43	518	5.0e- 42	(AL049 655) hypoth etical protei n [Arabi dopsis thalia na]
170340	ATU032 280	ATL8C1 3776:1 396..1	nap				ATL8C1 3776:1 185..7	0.89	g46217 3	43	365	2.6e- 38	GLUCOS AMINE- - FRUCTO SE-6- PHOSPH ATE AMINOT RANSFE RASE

170347	ATU032 287	ATL8C2 2681:8 18..1	nap											43	g23924 63	0.87	ATL8C2 2681:6 68..52 6		443	1.5e- 48	Myrosi nase From Sinapi s Alba s []
170348	ATU032 288	ATL8C1 0783:2 40..96 8	nap											43	g43712 80	0.87	ATL8C1 0783:2 40..37 7		204	5.9e- 22	(AC006 260) hypoth etical protei n [Arabi dopsis thalia na]
170349	ATU032 289	ATL8S1 7369:4 81..1	nap											43	g26243 02	0.86	ATL8S1 7369:4 30..14		420	1.6e- 34	(AL008 967) ald [Mycob acteri um tuberc ulosis]
170350	ATU032 290	ATL8C3 6252:1 ..2795	nap											43	g32419 43	0.86	ATL8C3 6252:4 16..27 95		1484	6.1e- 132	(AC004 625) hypoth etical protei n [Arabi dopsis thalia na]
170351	ATU032 291	ATL8C3 6006:1	nap											43	g33096 19	0.85	ATL8C3 6006:1		497	3.6e- 47	(AF074 916)

170352	ATU032 292	230..1	nap				184..4 11	0.85	g48951 95	43	477	2.6e- 42	(AC007 661) putati ve mitoch ondria l carrie r family protei n [Arabi dopsis thalia na]
170353	ATU032 293	ATL8C1 3034:2 509..1 277	ATL8S2 786:57 4..1	nap			ATL8C1 3034:1 512..1 277	0.85	g34137 14	43	692	9.5e- 70	(AC004 747) putati ve myrosi nase- bindin g protei n [Arabi dopsis thalia na]

170354	ATU032 294	ATL8C1 782:11 83..40 7	nap					ATL8C1 782:92 9..407	0.84	g32928 34	43	428	3.5e- 43	thalia na] (AL031 018) putati ve protei n [Arabi dopsis thalia na]
170355	ATU032 295	ATL8C3 6821:1 ..543	nap					ATL8C3 6821:2 85..53 0	0.84	g22135 95	43	247	9.0e- 23	(AC000 348) T7N9.1 5 [Arabi dopsis thalia na]
170356	ATU032 296	ATL8C4 6366:5 97..93	nap					ATL8C4 6366:4 81..11 0	0.83	g17309 58	43	386	8.9e- 33	HYPOTH ETICAL 43.5 KD PROTEI N IN COTD- KDUD INTERG ENIC REGION PRECUR SOR [Bacil lus subtil is]
170357	ATU032 297	ATL8C1 8724:1 ..548	nap					ATL8C1 8724:1 62..98	0.83	g48369 23	43	585	2.8e- 36	(AC007 153) Hypoth

170358	ATU032 298	ATL8C4 6299:1 212..1	nap				ATL8C4 6299:8 52..54 3	0.83	g33778 16	43	1492	2.0e- 130	etical protei n [Arabi dopsis thalia na]
170359	ATU032 299	ATL8C5 704:1. .336	nap				ATL8C5 704:10 4..311	0.82	g38606 65	43	241		(AJ235 270) unknow n [Ricke ttsia prowaz ekil]
170360	ATU032 300	ATL8S2 8067:4 90..1	nap				ATL8S2 8067:4 32..56	0.82	g17238 68	43	369	1.7e- 35	HYPOTH ETICAL 42.6 KD

170361	ATU032 301	ATL8C1 0982:2 557..1	nap							0.82	g45672 96	43	784	1.2e- 78	PROTEIN IN GSHB- ANSB INTERG ENIC REGION (O378) [Esche- richia coli]
170362	ATU032 302	ATL8C2 1899:5 63..1	nap							0.82	g99660	43	912	1.8e- 93	S- locus- specif ic glycop rotein SLR1 precu- sor - Arabid opsis thalia na [Arabi dopsis

170363	ATU032 303	ATL8C2 8432:1 ..793	nap				ATL8C2 8432:1 80..58 5	0.81	g45862 59	43	485	1.6e- 38	thalia na] (AL049 640) hydrol ase- like protei n [Arabi dopsis thalia na]
170364	ATU032 304	ATL8S1 3728:5 08..1	nap				ATL8S1 3728:5 08..30	0.80	g19457 21	43	195	9.2e- 16	(Z9404 3) hypoth etical protei n [Bacil lus subtil is]
170365	ATU032 305	ATL8C3 0417:2 38..95 2	nap				ATL8C3 0417:2 90..86 2	0.80	g45444 64	43	601	1.6e- 61	(AC006 580) putati ve chloro plast nucleo id DNA bindin g protei n [Arabi dopsis thalia na]
170366	ATU032	ATL8C1	nap				ATL8C1	0.80	g41917	43	1024		(AC005

170367	ATU032 307	ATL8S2 911:12 0..629	nap					0251:6 59..67		80					2.9e-06	79	43	g17093 30	0.79	ATL8S2 911:12 0..607					0251:6 59..67	917) putati ve cytoki nin oxidas e [Arabi dopsis thalia na]
																										NODULA TION PROTEI N NOLA [Brady rhizob ium sp.]
170368	ATU032 308	ATL8C1 2422:1 735..1	nap					ATL8C1 2422:1 616..1 025	0.78	g37639 16	43	501	7.7e-24	(AC004 450) unknow n protei n [Arabi dopsis thalia na]												
																										AC004 450) unknow n protei n [Arabi dopsis thalia na]
170369	ATU032 309	ATL8C3 0310:8 12..1	nap					ATL8C3 0310:7 74..82	0.78	g41065 74, g12375 5	43, 41	250, 154	2.6e-28, 3.7e-13	(AL031 866) ORF 7, len: 456 aa, highly simila r to AF0600 75 3,												
																										AL031 866) ORF 7, len: 456 aa, highly simila r to AF0600 75 3,

170371	310	3894:7 08..17 75					3894:7 08..17 51	90		43	219	1.0e- 13	605) putati ve protei n [Arabi dopsis thalia na]
	ATU032 311	ATL8S3 0959:1 ..575	nap				ATL8S3 0959:3 23..40 0	g44540 51		43			(AL035 394) putati ve polyga lactur onase [Arabi dopsis thalia na]
170372	ATU032 312	ATL8C2 2023:1 349..1	nap				ATL8C2 2023:1 349..8 42	g22621 05		43	563	1.5e- 28	(AC002 343) unknow n protei n [Arabi dopsis thalia na]
170373	ATU032 313	ATL8C4 4484:1 442..2 585	nap				ATL8C4 4484:1 442..2 481	g22889 97		43	992	1.5e- 120	(AC002 335) hypoth etical protei n [Arabi dopsis thalia na]

170374	ATU032 314	ATL8C2 7955:1 44..17 04	nap			ATL8C2 7955:1 44..16 53	0.77	933778 30	43	1070	(AF075 598) contai ns simila rity to Aplysi a califo rnica interm ediate filame nt protei n A (GB:X6 0297) [Arabi dopsis thalia na]
170375	ATU032 315	ATL8C1 0826:1 840..1 96	nap			ATL8C1 0826:1 840..1 96	0.77	934510 62	43	1037	(AL031 326) putati ve protei n [Arabi dopsis thalia na]
170376	ATU032 316	ATL8C3 0951:1 414..8 73	nap			ATL8C3 0951:1 145..9 62	0.77	948368 95	43	479	(AC007 369) Hypoth etical protei n [Arabi

170377	ATU032 317	ATL8C8 447:24 41..38 4	nap				ATL8C8 447:22 28..38 4	0.77	g45858 85	43	1468	1.1e- 133	dopsis thalia nal (AC005 850) Putati ve serine /threo nine kinase [Arabi dopsis thalia nal]
170378	ATU032 318	ATL8C2 5467:3 14..86 9	nap				ATL8C2 5467:3 14..53 5	0.76	g18545 81	43	359	3.4e- 30	(L2412 0) peroxi dase precu sor [Linum usitat issimu m]
170379	ATU032 319	ATL8S2 3029:1 08..57 9	nap				ATL8S2 3029:1 08..48 3	0.76	g24927 44	43	90	0.012	SORBIT OL DEHYDR OGENAS E (L- IDITOL 2- DEHYDR OGENAS E) (POLYO L DEHYDR OGENAS E)

170380	ATU032 320	ATL8C8 810:11 39..1	nap				ATL8C8 810:73 5..369	0.76	g31717 39	43	101	0.0005 3	[Rhodo bacter sphaer oides] (AJ005 833) homeod omain leucin e zipper protei n [Crater ostig ma planta gineum]
170381	ATU032 321	ATL8S1 5944:3 39..1	nap				ATL8S1 5944:1 30..26	0.76	g38609 24	43	188	4.4e- 14	(AJ235 271) PUTATI VE ENOYL- [Ricke ttsia prowaz ekii]
170382	ATU032 322	ATL8S2 3304:5 73..1	nap				ATL8S2 3304:3 65..12	0.76	g32183 76	43	127	4.3e- 13	(AL023 862) putati ve oxidor educta se [Strept omyces coelic olor]

170383	ATU032 323	ATL8C4 0631:1 ..748	nap			ATL8C4 0631:3 02..72 4	0.76	g32427 13	43	638	1.3e- 75	(AC003 040) putati ve transp osase [Arabi dopsis thalia na]
170384	ATU032 324	ATL8C4 4432:1 ..863	nap			ATL8C4 4432:8 4..822	0.75	g22135 93	43	651	2.3e- 53	(AC000 348) T7N9.1 3 [Arabi dopsis thalia na]
170385	ATU032 325	ATL8S2 0139:1 ..513	nap			ATL8S2 0139:2 54..49 4	0.75	g44328 16	43	406	2.2e- 32	(AC006 593) hypoth etical protei n [Arabi dopsis thalia na]
170386	ATU032 326	ATL8C8 460:10 58..19 91	nap			ATL8C8 460:11 91..19 02	0.74	g47536 53	43	356	4.1e- 35	(AL049 751) putati ve protei n [Arabi dopsis thalia na]
170387	ATU032 327	ATL8C2 0531:2	nap			ATL8C2 0531:1	0.74	g42494 17	43	1035	7.5e- 51	(AC006 072)

170388	ATU032 328	ATL8C9 081:14 23..1	nap				710..1 85	0.74	g23885 74	43	270	(AC000 098) Strong simila rity to Phalae nopsis homeob ox protei n (gb U3 4743). [Arabi dopsis thalia nal]
170389	ATU032 329	ATL8C1 7237:1 ..3055	nap				ATL8C1 7237:1 87..30 27	0.73	g43780 66	43	1409	1.0e- 153 (AF098 806) polypr oteins [Sorgh um bicolor r]
170390	ATU032 330	ATL8C2 2679:1 002..1	nap				ATL8C2 2679:6 39..85	0.72	g23924 63	43	488	3.1e- 50 Myrosi nase From Sinapi s Alba []

170391	ATU032 331	ATL8C7 848:14 61..1	nap			ATL8C7 848:13 92..74	0.72	g48357 85	43	2110	1.3e- 188	(AC007 296) Strong simila rity to gb X95 759 solubl e- starch - syntha se precu sor (SSIII) from Solanu m tubero sum. [Arabi dopsis thalia na]
170392	ATU032 332	ATL8S2 2283:1 ..386	nap			ATL8S2 2283:4 4..270	0.72	g38760 06	43	106	0.63	(Z3571 9) simila r to cuticu lar collag en; cDNA EST EMBL:C 13380 comes from

[illegible]

170394	ATU032 334	ATL8C4 3404:2 159..1	nap					ATL8C4 3404:1 847..1 36	0.71	g28646 23	43	2281		na retro ranspo son Athila (GB:X8 1801) [Arabi dopsis thalia na]
170395	ATU032 335	ATL8S1 6789:5 84..17 4	nap					ATL8S1 6789:5 34..18 3	0.71	g45391 81	43	296	1.3e- 28	(AL021 811) putati ve protei n [Arabi dopsis thalia na]
170396	ATU032 336	ATL8C8 498:37 76..1	nap					ATL8C8 498:43 7..28, ATL8C8 498:37 36..80 3	0.70, 0.84	g32528 18	43	3247	0.0	(AC004 705) hypo thetical protein [Arabi

170400	ATU032 340	ATL8C1 3116:2 41..13 49	nap					ATL8C1 3116:4 93..29 1	0.69		g45593 34	43	299	1.7e- 28	[legio nella pneumo phila] (AC007 087) unknow n protei n [Arabi dopsis thalia na]
170401	ATU032 341	ATL8C1 7286:1 317..2 59	nap					ATL8C1 7286:1 154..4 16	0.69		g32126 10	43	267	4.6e- 23	Chain A, Sulfit e Oxidas e From Chicke n Liver []
170402	ATU032 342	ATL8C4 6630:1 ..2035	nap					ATL8C4 6630:1 37..93 7, ATL8C4 6630:1 548..1 982	0.68, 0.49		g44328 07	43	1818	2.1e- 165	(AC006 570) putati ve polypr otein [Arabi dopsis thalia na]
170403	ATU032 343	ATL8C3 7464:1 ..557	nap					ATL8C3 7464:1 03..55 1	0.67		g48352 24	43	252		(AL049 862) protei n kinase ATN1

170404	ATU032 344	ATL8C3 1079:1 ..1158	nap					ATL8C3 1079:6 22..11 58	0.67		g25650 11	43	717	3.1e- 65	(AC002 983) putati ve MuDR- A-like transp oson protei n [Arabi dopsis thalia na]
170405	ATU032 345	ATL8C5 0019:1 350..1	nap					ATL8C5 0019:8 60..22	0.67		g45673 18	43	1430	1.4e- 117	(AC005 956) hypoth etical protei n [Arabi dopsis thalia na]
170406	ATU032 346	ATL8C1 8579:1 ..636	nap					ATL8C1 8579:1 61..63 6	0.66		g44552 03	43	383	2.9e- 36	(AL035 440) putati ve protei n [Arabi dopsis thalia na]

170407	ATU032 347	ATL8C2 838:1. .1647	nap				ATL8C2 838:96 ..1631	0.66	g99721	43	1598	6.1e- 165	na] retrov irus- relate d polypr oteins - Arabid opsis thalia na retrot ranspo son Tal-3 [Arabi dopsis thalia na]
170408	ATU032 348	ATL8C9 581:1. .2045	nap				ATL8C9 581:10 8..767	0.66	g62659 8	43	256	4.8e- 16	hypoth etical protei n YHR016 C - yeast (Sacch aromyc es cerevi siae) [Sacch aromyc es cerevi siae]
170409	ATU032 349	ATL8S3 0374:5 10..1	nap				ATL8S3 0374:5 10..71	0.66	g31231 06	43	98	1.8e- 05	HYPOTH ETICAL 21.6

170410	ATU032 350	ATL8C2 2325:2 552..1	nap					ATL8C2 2325:2 552..5 93	0.66	g45220 05	43	1607	1.2e- 167	KD PROTEI N SLR129 0 [Synec hocyst is sp.] (AC007 069) putati ve revers e transc riptas e [Arabi dopsis thalia nal]
170411	ATU032 351	ATL8C3 8324:1 ..469	nap					ATL8C3 8324:3 13..11 1	0.65	g26512 96	43	720	1.5e- 49	(AC002 336) b-zip DNA- bindin g protei n [Arabi dopsis thalia nal]
170412	ATU032 352	ATL8C5 594:1. .545	nap					ATL8C5 594:11 8..246	0.65	g45843 58	43	362	4.4e- 13	(AC006 420) unknow n protei n

170413	ATU032 353	ATL8C9 974:82 0..1	nap					ATL8C9 974:59 0..126	0.65	g39278 25	43	426	6.8e- 48	[Arabi dopsis thalia na] (AC005 727) putati ve dUDP- glucos e 4-6- dehydr atase [Arabi dopsis thalia na]
170414	ATU032 354	ATL8C2 1556:1 233..1	nap					ATL8C2 1556:1 169..9 3	0.65	g22810 90	43	388	1.4e- 40	(AC002 333) hypoth etical protei n [Arabi dopsis thalia na]
170415	ATU032 355	ATL8S2 3944:5 33..1	nap					ATL8S2 3944:4 71..26	0.65	g21819 79	43	178	1.6e- 15	(Z9607 2) hypoth etical protei n Rv2688 c [Mycob acteri um tuberc ulosis]

170416	ATU032 356	ATL8C1 6396:2 630..3 281	nap					ATL8C1 6396:2 678..2 906	0.64	g45880 08	43	222	9.4e- 19	(AF085 279) hypoth etical protei n [Arabi dopsis thalia na]
170417	ATU032 357	ATL8C2 495:12 60..1	nap					ATL8C2 495:12 60..42	0.64	g45673 05	43	764	7.1e- 74	(AC005 956) hypoth etical protei n [Arabi dopsis thalia na]
170418	ATU032 358	ATL8S2 8350:7 51..1	nap					ATL8S2 8350:5 30..20	0.64	g39143 88	43	150	3.9e- 13	2,3- BISPHO SPHOGL YCERAT E- INDEPE NDENT PHOSPH OGLYCE RATE MUTASE (PHOSP HOGLYC EROMUT ASE) (BPG- INDEPE NDENT PGAM)

170419	ATU032 359	ATL8S2 5382:4 54..1	nap				ATL8S2 5382:6 5..9	0.63	g23426 86	43	307	2.0e- 31	[Synec hocyst is sp.] (AC000 106) Simila r to Saccha romyce s hypoth etical protei n YDR051 c (gb Z4 9209). ESTs gb T44 436,gb 142252 come from this gene. [Arabi dopsis thalia na]
170420	ATU032 360	ATL8C2 8467:7 60..1	nap				ATL8C2 8467:4 87..75	0.63	g48951 90	43	305	3.8e- 30	(AC007 661) unknow n protei n [Arabi dopsis thalia

170421	ATU032 361	ATL8C2 8236:1 067..4 92	nap				ATL8C2 8236:1 067..4 92	0.63	g43253 49	43	238	9.7e- 16	na] (AF128 394) contai ns simila rity to Petuni a PTTA' (GB:AF 009516) [Arabi dopsis thalia na]
170422	ATU032 362	ATL8C1 4310:8 95..1	nap				ATL8C1 4310:5 39..20 8	0.63	g48951 90	43	277	3.0e- 08	(AC007 661) unknow n protei n [Arabi dopsis thalia na]
170423	ATU032 363	ATL8C1 1491:1 ..1847	nap				ATL8C1 1491:3 81..17 63	0.61	g21601 54	43	382	2.5e- 41	(AC000 375) F19K23 .18 gene produc t [Arabi dopsis thalia na]
170424	ATU032	ATL8S3	nap				ATL8S3	0.61	g38608	43	641	1.5e-	(AJ235

170429	ATU032 369	ATL8C2 432:1. .674	nap					ATL8C2 432:39 2..589	0.59	g28946 06	43	368	6.1e- 36	(MN) [Plect onema boryan um] (AL021 889) putati ve protei n [Arabi dopsis thalia na]
170430	ATU032 370	ATL8C1 429:31 37..10 61	nap					ATL8C1 429:23 53..11 33	0.59	g49143 61	43	1841	4.3e- 159	(AC007 289) putati ve revers e transc riptas e [Arabi dopsis thalia na]
170431	ATU032 371	ATL8S8 37:671 ..1	nap					ATL8S8 37:649 ..32	0.58	g42635 49	43	1156	2.1e- 118	(AC006 250) putati ve En/Spm transp oson hypoth etical protei n 1 [Arabi

170436	ATU032 376	ATL8C3 278:34 90..1	nap					ATL8C3 278:29 32..46 2	0.55	g46999 27	43	388	1.3e- 13	dopsis thalia nal (AC007 125) putati ve transp oson protei n [Arabi dopsis thalia nal]
170437	ATU032 377	ATL8C4 8278:4 09..1	nap					ATL8C4 8278:4 09..19	0.54	g43357 45	43	576	3.5e- 54	(AC006 284) putati ve hydrol ase (conta ins an estera se/lip ase/th ioeste rase active site serine domain (prosi te: PS5018 7) [Arabi dopsis thalia nal]

170438	ATU032 378	ATL8C3 290:12 87..1	nap				ATL8C3 290:12 87..13 5	0.54	g33778 16	43	1132	3.7e- 106	(AF076 275) contai ns simila rity to Arabid opsis thalia na retrot ranspo son Athila (GB:X8 1801) [Arabi dopsis thalia na]
170439	ATU032 379	ATL8C2 2133:1 211..1	nap				ATL8C2 2133:1 032..2 61	0.54	g47536 60	43	232	3.1e- 20	(AL049 751) putati ve protei n [Arabi dopsis thalia na]
170440	ATU032 380	ATL8C1 377:34 44..73	nap				ATL8C1 377:34 44..30 2	0.53	g34618 40	43	1600	2.9e- 144	(AC005 315) putati ve revers e transc riptas e

170445	ATU032 385	ATL8C2 0521:6 43..26 9	nap				ATL8C2 0521:5 80..34 1	0.52		g33427 98	43	164	1.8e- 13	a] (AF061 240) glutam ine cyclot ransfe rase precur sor [Caric a papaya]
170446	ATU032 386	ATL8C4 3711:5 74..11 5	nap				ATL8C4 3711:4 82..27 0	0.52		g23449 03	43	712		(AC002 388) triacy glycer ol lipase isolog [Arabi dopsis thalia na]
170447	ATU032 387	ATL8C2 5354:1 458..5 9	nap				ATL8C2 5354:1 377..2 68	0.52		g35496 81	43	827	5.9e- 92	(AL031 394) male steril ity 2- like protei n [Arabi dopsis thalia na]
170448	ATU032 388	ATL8S1 5922:3 56..1	nap				ATL8S1 5922:2 03..17	0.52		g32419 72	43	107	4.9e- 05	(U7958 0) ChpD

	392	0919:7 44..25 5					0919:6 34..25 5		75				38	508) 12894 [Arabi dopsis thalia nal]
170453	ATU032 393	ATL8S1 1574:4 82..44	nap				ATL8S1 1574:4 38..25 6	0.45	g26483 34	43	94	1.4e- 08	(AE000 954) deoxyh ypusin e syntha se (dysl- 1) [Archa eoglob us fulgid us]	
170454	ATU032 394	ATL8C4 3304:1 863..1	nap				ATL8C4 3304:1 620..4 25	0.45	g29613 49	43	1443		(AL022 140) LTR retrot ranspo son like protei n [Arabi dopsis thalia nal]	
170455	ATU032 395	ATL8S1 8000:5 00..1	nap				ATL8S1 8000:4 57..25	0.44	g20726 97	43	98	1.9e- 06	(Z9512 1) hypoth etical protei n Rv3230	

170456	ATU032 396	ATL8S6 56:577 ..1	nap				ATL8S6 56:577 ..347	0.43	g33675 78	43	161	1.1e- 13	(AL031 135) protei n kinase - like protei n [Arabi dopsis thalia na]	C [Mycob acteri um tuberc ulosis]
170457	ATU032 397	ATL8C4 1787:1 ..907	nap				ATL8C4 1787:8 1..763	0.42	g33193 71	43	615	7.2e- 61	(AF077 409) Simila r to pectin esterase; T24M8. 6 [Arabi dopsis thalia na]	
170458	ATU032 398	ATL8S1 4439:4 21..1	nap				ATL8S1 4439:2 93..39	0.42	g39246 44	43	256	6.9e- 23	HYPOTH ETICAL 34.5 KD PROTEI N IN CLCB- CLCD	

170459	ATU032 399	ATL8C1 2699:9 93..1	nap							ATL8C1 2699:9 93..38 9	0.41	g30803 75	43	448	8.9e- 24	INTERG ENIC REGION PRECUR SOR [] (AL022 580) putati ve protei n [Arabi dopsis thalia na]
170460	ATU032 400	ATL8S1 7420:5 55..36 8	nap									g33778 46	43	111	1.9e- 07	(AF076 274) No defini tion line found [Arabi dopsis thalia na]
170461	ATU032 401	ATL8C1 2669:8 30..43 9	nap									g36680 75	43	194	7.2e- 27	(AC004 667) hypo thetical protei n [Arabi dopsis thalia na]
170462	ATU032 402	ATL8C9 464:10 26..12 90	nap									g46802 12	43	103	9.7e- 05	(AF114 171) hypo thetical

170463	ATU032 403	ATL8C4 9404:4 26..83 6	nap									g42205 33	43	619	4.0e- 58	protein [Sorghum bicolor L] (AL035 356) putative mitochondrial uncoupling protein [Arabidopsis thaliana na]
170464	ATU032 404	ATL8S2 9715:4 38..1	nap									g42204 71	43	495	2.1e- 50	(AC006 069) receptor- like kinase [Arabidopsis thaliana na]
170465	ATU032 405	ATL8C3 1438:1 ..1854	nap									g45859 85	43	2661	7.2e- 262	(AC005 287) Hypothetical protein [Arabidopsis thaliana na]

170466	ATU032 406	ATL8C2 6612:1 894..7 57	nap							g39012 94	43	126	2.5e- 08	nal (AF089 711) rpp8 [Arabi dopsis thalia nal]
170467	ATU032 407	ATL8C1 0478:1 548..8 73	nap							g22450 80	43	966		(Z9734 3) myosin heavy chain homolo g [Arabi dopsis thalia nal]
170468	ATU032 408	ATL8S4 714:1. .511	nap							g12672 4	43	194	4.2e- 19	MANNOS E-6- PHOSPH ATE ISOMER ASE (PHOSP HOMANN OSE ISOMER ASE) (PMI) (PHOSP HOHEXO MUTASE) [Esche richia coli]
170469	ATU032 409	ATL8C4 6784:1	nap							g47739 08	43	860	3.5e- 71	(AF147 259)

170471	ATU032 411	ATL8S4 244:58 6..1	nap										g29051 1	43	324	1.9e- 25	protein [Arabi dopsis thalia na]
170472	ATU032 412	ATL8S2 411:14 6..652	nap										g40564 68	43	181	3.8e- 18	(AC005 990) Contai ns simila rity to gb X66 426 polyga lactur onase from Persea americ ana and is a member of the signal peptid ase family PF1004 61 and polyga lactur

170473	ATU032 413	ATL8C2 7672:6 29..1	nap								g28326 78	43	118		onase family PF1002 95. [Arabi dopsis thalia na]
170474	ATU032 414	ATL8S1 8541:4 54..12 9	nap								g29838 97	43	116	0.0003 3	(AL021 712) putati ve protei n [Arabi dopsis thalia na]
170475	ATU032 415	ATL8S4 084:20 2..1	nap								g31356 93	43	97	5.7e- 06	(AE000 744) ABC transp orter [Aquif ex aeolic us]
170476	ATU032 416	ATL8C8 055:1.	nap								g30637 03	43	1569	1.4e- 163	(AF064 201) glutat hione S- transf erases [Gossy pium hirsut um]
															(AL022 537)

170477	ATU032 417	.1164	nap							g25860 83	43	712	2.6e- 74	(U7272 5) recept or kinase -like protei n [Oryza longis tamina ta]	putati ve protei n [Arabi dopsis thalia na]
170478	ATU032 418	ATL8C4 7708:1 ..1171	nap							g46801 80	43	725	2.7e- 68	(AF111 709) polypr oteins [Oryza sativa subsp. indica]	
170479	ATU032 419	ATL8S1 3226:1 76..39 8	nap							g45585 63	43	111	1.8e- 08	(AC007 138) putati ve NifU- like metall oclust er assemb ly	

170480	ATU032 420	ATL8C4 660:13 27..33 4	nap								g44540 39	43	663	9.1e- 70	factor [Arabi dopsis thalia na] (AL035 394) putati ve Na+/H+ - exchan ging protei n [Arabi dopsis thalia na]
170481	ATU032 421	ATL8S1 3394:1 ..285	nap								g28298 72	43	78	0.45	(AC002 396) Hypoth etical protei n [Arabi dopsis thalia na]
170482	ATU032 422	ATL8S1 9636:1 ..324	nap								g19421 79	43	251	6.2e- 21	Lumen- Side Domain Of Reduce d Cytoch rome F At -35 Degree s

170486	ATU032 426	ATL8C2 7264:6 74..1	nap							g45104 06	43	366		[Pseudomonas aeruginosa] (AC006587) putative protein kinase [Arabis dopsis thaliana]
170487	ATU032 427	ATL8C2 4617:1 226..4 34	nap							g30045 47	43	488	1.3e-40	(AC003673) unknown protein [Arabis dopsis thaliana]
170488	ATU032 428	ATL8C3 794:20 16..1	nap							g22135 82	43	1163	8.9e-93	(AC000348) T7N9.2 [Arabis dopsis thaliana]
170489	ATU032 429	ATL8C5 22:189 0..220 6	nap							g32985 43	43	332	3.6e-23	(AC004681) hypothetical protein [Arabis dopsis

170493	ATU032 433	ATL8S2 217:1. .457	nap						g44163 03	43	538	4.9e- 35	(AF105 716) gag protei n [Zea mays]
170494	ATU032 434	ATL8C2 2310:7 20..1	nap						g42635 45	43	799	9.1e- 79	(AC006 250) putati ve Athila retro elemen t ORF1 protei n [Arabi dopsis thalia na.]
170495	ATU032 435	ATL8S3 268:42 1..1	nap						g16526 12	43	216	1.2e- 12	(D9090 6) glutat hione synthe tase [Synec hocyst is sp.]
170496	ATU032 436	ATL8C2 7311:2 132..1 581	nap						g44903 39	43	209		(AL035 656) putati ve protei n [Arabi dopsis thalia

170497	ATU032 437	ATL8C2 6486:1 ..644	nap									g26233 03	43	552	4.6e- 57	na] (AC002 409) putati ve cytoch rome P450 [Arabi dopsis thalia na]
170498	ATU032 438	ATL8S2 0781:4 78..1	nap									g12030 2	43	337	1.5e- 25	FLAGEL LAR P- RING PROTEI N PRECUR SOR [Salmo nella typhim urium]
170499	ATU032 439	ATL8S2 9381:1 ..486	nap									g45875 59	43	501	1.2e- 48	(AC006 577) Contai ns simila rity to gb Y13 722 Hap2c Transc riptio n factor from Arabid opsis

170503	ATU032 443	ATL8C1 6324:1 001..1 589	nap							g45389 17	43	170	1.3e- 10	na] (AL049 482) putati ve protei n [Arabi dopsis thalia na]
170504	ATU032 444	ATL8C1 0685:1 406..1 793	nap							g49268 32	43	604		(AC004 135) T17H7. 17 [Arabi dopsis thalia na]
170505	ATU032 445	ATL8S2 0780:1 ..540	nap							g16661 58	43	339	5.2e- 31	(Z8145 1) proA [Mycob acteri um tuberc ulosis]
170506	ATU032 446	ATL8C2 8189:1 221..9 53	nap							g48862 86	43	291	3.5e- 20	(AL050 300) putati ve protei n [Arabi dopsis thalia na]
170507	ATU032 447	ATL8C1 8099:1	nap							g48369 17	43	541	1.0e- 40	(AC007 153)

170508	ATU032 448	..1626	nap									g33190 72	43	668		80099 [Arabi dopsis thalia na]
		ATL8S6 505:52 0..1														Chain A, Human Ornith ine Aminot ransfe rase Comple xed With The Neurot oxin Gabacu line []
170509	ATU032 449	ATL8C8 745:57 1..133 3	nap									g45811 67	43	775	4.7e- 53	(AC006 220) putati ve transp oson MuDR protei n [Arabi dopsis thalia na]
170510	ATU032 450	ATL8S2 924:74 9..275	nap									g43772 14	43	129	5.9e- 12	(AE001 670) AMP Nucleo sidase

170511	ATU032 451	ATL8C1 7389:1 ..960	nap							g38595 98	43	579	7.9e- 52	[Chlamydia pneumoniae] (AF104919) contains similarity to Myb DNA-binding domains (Pfam: PF00249, E=3.7e-27, N=3) [Arabidopsis thaliana]
170512	ATU032 452	ATL8C3 1872:1 ..2370	nap							g29613 48	43	1141	1.4e- 98	(AL022140) putative protein [Arabidopsis thaliana]
170513	ATU032 453	ATL8C4 6997:2 685..1 901	nap							g42635 45	43	830	4.5e- 124	(AC006250) putative

170514	ATU032 454	ATL8S1 8977:5 5..381	nap									g11682 01	43	99	0.0001 7	14-3- 3-LIKE PROTEI N RCI2 [Arabi dopsis thalia na]	Athila retroee lement ORF1 protei n [Arabi dopsis thalia na]
170515	ATU032 455	ATL8C2 1480:1 ..391	nap									g18906 55	43	255	4.0e- 22	(U6785 5) UDP-3- O- acyl- GlcNAC deacet ylase [Pseud omonas aerugi nosa]	
170516	ATU032 456	ATL8C1 489:17 82..1	nap									g43357 20	43	952	3.2e- 80	(AC006 248) putati ve revers e transc riptas e Tal- 1	

170530	ATU032 470	ATL8S1 6128:4 87..1	nap										g13252 8	43	187	3.6e- 19	L- RHAMNO SE- PROTON SYMPOR T (L- RHAMNO SE-H+ TRANSP ORT PROTEI N) [Esche richia coli]	INE-- TRNA LIGASE) (CYSRS) []
170531	ATU032 471	ATL8C2 393:50 7..1	nap										g47339 60	43	486	1.5e- 46	(AC007 294) putati ve zinc- finger protei n [Arabi dopsis thalia na]	
170532	ATU032 472	ATL8S2 7799:1 ..471	nap										g31842 75	43	596	3.7e- 59	(AC004 136) hypoth etical protei n [Arabi	

170533	ATU032 473	ATL8C2 856:1. .806	nap								g31641 32	43	828	6.3e- 72	(D7860 1) cytoch rome P450 monoox ygenase [Arabi dopsis thalia na]
170534	ATU032 474	ATL8C1 3366:2 299..1 181	nap					ATL8C1 3366:2 213..1 181	1.00		g45394 52	42	945	3.7e- 92	(AL049 500) putati ve phosph oribos ylanth ranilla te transf erase [Arabi dopsis thalia na]
170535	ATU032 475	ATL8S2 7785:4 3..690	nap								g17032 19	43	122	1.6e- 10	AI01 PROTEI N [Arabi dopsis thalia na]
170536	ATU032 476	ATL8C1 7146:8 82..1	nap								g47387 4	43	110	5.8e- 09	(U0828 5) a membra

170537	ATU032 477	ATL8C1 348:46 1..639	nap							g33554 88	43	230	2.8e- 20	(AC004 218) putati ve riboso mal protei n S15a [Arabi dopsis thalia na]	ne- associ ated salt- induci ble protei n [Nicot iana tabacu m]
170538	ATU032 478	ATL8C6 956:55 9..142 2	nap							g32577 43	43	149	4.8e- 13	(AP000 006) 357aa long hypoth etical protei n [Pyroc occus horiko shii]	
170539	ATU032 479	ATL8S1 1122:5 08..1	nap							g26324 56	43	103	4.4e- 06	(Z9910 4) simila r to	

170540	ATU032 480	ATL8S6 917:1. .575	nap							g29807 88	43	309		chlora mpheni col resist ance protei n [Bacil lus subtil is]
170541	ATU032 481	ATL8C1 7445:9 79..21 9	nap							g45811 67	43	760	9.3e- 68	(AL022 197) putati ve protei n [Arabi dopsis thalia na]
170542	ATU032 482	ATL8C9 796:78 1..83	nap							g32128 68	43	339	6.8e- 18	(AC006 220) putati ve transp oson MuDR protei n [Arabi dopsis thalia na]
														(AC004 005) unknow n protei n

170554	ATU032 494	ATL8S2 3697:6 06..1	nap								g16531 84	43	277	2.1e- 25	a] (D9091 1) hypoth etical protei n [Synec hocyst is sp.]
170555	ATU032 495	ATL8C1 5303:1 ..802	nap								g43888 33	43	1435	3.8e- 135	(AC006 528) putati ve zinc- finger protei n, 5' partia l [Arabi dopsis thalia nal
170556	ATU032 496	ATL8C1 7052:3 63..1	nap								g45843 59	43	245	5.7e- 22	(AC006 420) hypoth etical protei n [Arabi dopsis thalia nal
170557	ATU032 497	ATL8C1 1861:7 35..51 0	nap								g36418 70	43	119	0.93	(AJ011 013) hypoth etical protei

170558	ATU032 498	ATL8S5 679:1. .443	nap									g25066 39	43	123	2.3e- 09	n [Cicer arieti num]
170559	ATU032 499	ATL8C3 2568:1 ..1239	nap									g22089 08	43	493	5.6e- 52	HYPOTH ETICAL 38.2 KD PROTEI N IN PABC- HOLB INTERG ENIC REGION [Esche richia coli]
170560	ATU032 500	ATL8C5 283:13 85..90 4	nap									g53731 3	43	537	1.1e- 50	(AB004 809) phosph ate transp orter [Catha ranthu s roseus]
170561	ATU032	ATL8C2	nap									g14952	43	702	1.2e-	(L3615 9) unknow n protei n [Medic ago sativa]
																(X9782)

	501	5696:1 022..1							59				69	6) orf04 [Arabi dopsis thalia nal]
170562	ATU032 502	ATL8S9 90:120 ..507	nap						g45858 78	43	239	8.3e- 23	(AC005 850) Unknown n protei n [Arabi dopsis thalia nal]	
170563	ATU032 503	ATL8S1 5648:1 ..235	nap					ATL8S1 5648:7 9..235	g11731 72	42	141	6.9e- 11	RIBOSO ME RECYCL ING FACTOR (RIBOS OME RELEAS ING FACTOR) (RRF) [Haemo philus influe nzae Rd]	
170564	ATU032 504	ATL8C8 369:18 7..565	nap					ATL8C8 369:18 9..389	g29613 85	42	169	4.3e- 12	(AL022 141) putati ve protei n [Arabi	

170565	ATU032 505	ATL8S3 357:47 1..189	nap				ATL8S3 357:43 4..189	0.98	g26456 99	42	91	4.3e- 07	dopsis thalia na] (AF031 933) glycin e-rich RNA- bindin g protei n [Eupho rbia esula]
170566	ATU032 506	ATL8C4 0574:3 58..1	nap				ATL8C4 0574:3 55..12 2	0.98	g46886 15	42	152	2.6e- 13	(AJL31 636) D-type cyclin [Arabi dopsis thalia na]
170567	ATU032 507	ATL8C5 596:14 65..66 4	nap				ATL8C5 596:11 77..66 4	0.97	g43357 37	42	297	1.3e- 27	(AC006 248) putati ve serine /threo nine kinase [Arabi dopsis thalia na]
170568	ATU032 508	ATL8C1 0404:4 621..2 655	nap				ATL8C1 0404:4 443..2 674	0.97	g45070 71	42	498		SWI/SN F relate d, matrix

170569	ATU032 509	ATL8C2 7098:2 372..2 30	nap						ATL8C2 7098:2 207..2 30	0.96	g28945 98	42	768	5.2e- 70	(AL021 889) putati ve protei n [Arabi dopsis thalia nal]
170570	ATU032 510	ATL8C4 1766:7 14..10 7	nap						ATL8C4 1766:5 52..14 5	0.96	g23927 65	42	347	8.7e- 28	(AC002 534) hypoth etical protei n [Arabi dopsis thalia nal]
170571	ATU032 511	ATL8C2 5165:1 269..2 282	nap						ATL8C2 5165:1 274..2 176	0.95	g16442 91	42	568	7.9e- 66	(Z7329 5) recept or-

170572	ATU032 512	ATL8C3 2718:1 220..1	nap				ATL8C3 2718:1 066..5 03	0.95	g25009 81	42	672	2.2e- 58	like protei n kinase [Catha ranthu s roseus]
170573	ATU032 513	ATL8C3 3325:1 ..1807	nap				ATL8C3 3325:1 03..13 66	0.95	g21964 66	42	846	1.8e- 44	(Y1367 3) TATA bindin g protei n- associ ated factor [Arabi dopsis thalia na]
170574	ATU032	ATL8C1	nap				ATL8C1	0.95	g32617	42	717	9.3e-	(Z9558

514	0909:6 7..840						0909:6 7..793		75			74	4) hypoth etical protei n Rv1165 [Mycob acteri um tuberc ulosis]
170575	ATU032 515	ATL8C3 0203:1 378..2 96	nap				ATL8C3 0203:1 162..2 96	0.94	g35102 55	42	118	7.1e- 09	(AC005 310) hypoth etical protei n [Arabi dopsis thalia na]
170576	ATU032 516	ATL8C1 8249:3 96..1	nap				ATL8C1 8249:3 96..44	0.92	g29470 57	42	173	2.7e- 13	(AC002 521) hypoth etical protei n [Arabi dopsis thalia na]
170577	ATU032 517	ATL8C4 7991:1 485..6 00	nap				ATL8C4 7991:1 008..6 00	0.92	g21546 09	42	201	3.6e- 22	(D6350 9) endoxy logluc an transf erase relate

170578	ATU032 518	ATL8C3 2243:1 532..1	nap					ATL8C3 2243:1 475..4 4	0.92	g48502 82	42	1008	1.6e- 80	(AL049 876) putati ve acyl- CoA synthe tase [Arabi dopsis thalia na]
170579	ATU032 519	ATL8C4 8874:1 493..1	nap					ATL8C4 8874:1 493..1 14	0.92	g44681 51	42	475	6.1e- 33	(AJ131 999) sucros e syntha se [Crata rostig ma planta gineum]
170580	ATU032 520	ATL8C3 2811:1 06..20 90	nap					ATL8C3 2811:1 06..19 46	0.91	g29613 90	42	1110	7.8e- 90	(AL022 141) beta- galact osidas e like protei n [Arabi

170581	ATU032 521	ATL8C3 258:1. .1267	nap				ATL8C3 258:53 .1267	0.91	g39278 35	42	1795	1.5e- 187	dopsis thalia na] (AC005 727) simila r to Strept omyces PapA [Arabi dopsis thalia na]
170582	ATU032 522	ATL8C2 4291:1 765..1	nap				ATL8C2 4291:1 765..4 6	0.91	g28427 04	42	389	1.2e- 31	HYPOTH ETICAL 73.3 KD PROTEI N C6G9.1 4 IN CHROMO SOME I [Schiz osacch aromyc es pombe]
170583	ATU032 523	ATL8C4 4411:1 ..878	nap				ATL8C4 4411:6 2..509	0.91	g10764 44	42	613	2.9e- 60	cyclin - rape [Brass ica napus]
170584	ATU032 524	ATL8S1 7169:1 ..476	nap				ATL8S1 7169:5 6..462	0.90	g13635 28	42	755	1.6e- 74	ga9 protei n - maize [Zea mays]

170585	ATU032 525	ATL8C3 7618:1 031..1 361	nap				ATL8C3 7618:1 148..1 324	0.90	g47739 10	42	331	5.5e- 33	(AF147 259) No defini tion line found [Arabi dopsis thalia nal]
170586	ATU032 526	ATL8C3 5921:4 89..1	nap				ATL8C3 5921:2 38..17 9	0.90	g16519 47	42	62	0.73	(D9090 1) hypo thetical protein [Synec hocyst is sp.]
170587	ATU032 527	ATL8C2 6158:1 051..1	nap				ATL8C2 6158:9 98..7	0.89	g48504 12	42	478	2.0e- 48	(AC007 288) putati ve MuDR MURA transp osase [Arabi dopsis thalia nal]
170588	ATU032 528	ATL8C3 2888:1 ..528	nap				ATL8C3 2888:5 2..489	0.89	g17034 47	42	237	9.8e- 27	L- ASPARA GINASE (L- ASPARA GINE AMIDOH

170589	ATU032 529	ATL8C4 6589:2 558..7 83	nap					ATL8C4 6589:1 643..1 031	0.89			g36953 87	42	1519	2.4e- 109	YDROLA SE) [Lupin us albus] (AF096 371) contai ns simila rity to repl ic ation protei n A1 [Arabi dopsis thalia na]
170590	ATU032 530	ATL8C3 3379:1 605..2 07	nap					ATL8C3 3379:9 45..20 7	0.88			g44328 01	42	553	7.2e- 33	(AC006 437) unknow n protei n [Arabi dopsis thalia na]
170591	ATU032 531	ATL8C3 6296:1 079..2 17	nap					ATL8C3 6296:9 59..21 7	0.88			g34829 19	42	548	4.7e- 32	(AC003 970) Putati ve protei n kinase [Arabi dopsis thalia na]

170592	ATU032 532	ATL8C1 6851:8 40..1	nap				ATL8C1 6851:8 40..17 1	0.88	g17698 98	42	762	3.9e- 73	na] (Y0801 0) lectin recept or kinase [Arabi dopsis thalia na]
170593	ATU032 533	ATL8C1 1938:1 ..1101	nap				ATL8C1 1938:3 65..94 8	0.86	g12724 3	42	202	6.6e- 08	AUTONO MOUS TRANSP OSABLE ELEMEN T EN-1 MOSAIC PROTEI N (SUPPR ESSOR- MUTATO R SYSTEM PROTEI N) (SPM) [Zea mays]
170594	ATU032 534	ATL8S1 9344:4 61..1	nap				ATL8S1 9344:4 61..67	0.86	g26222 07	42	198	2.2e- 20	(AE000 881) conser ved protei n [Metha nobact erium thermo

170595	ATU032 535	ATL8C1 4484:1 292..2 31	nap					ATL8C1 4484:1 234..2 31	0.85	g32427 08	42	645	3.3e- 61	(AC003 040) putati ve serine /threo nine protei n kinase [Arabi dopsis thalia na]
170596	ATU032 536	ATL8C1 4077:1 ..1929	nap					ATL8C1 4077:8 0..741 , ATL8C1 4077:1 708..1 265	0.85, 0.77	g42630 44	42	458	1.3e- 49	(AC005 142) hypoth etical protei n [Arabi dopsis thalia na]
170597	ATU032 537	ATL8S2 3209:1 16..49 9	nap					ATL8S2 3209:1 34..43 3	0.85	g24953 98	42	179	1.4e- 07	HYPOTH ETICAL TRANSC RIPTIO NAL REGULA TOR IN DMSC- PFLA INTERG ENIC REGION [Esche

170598	ATU032 538	ATL8C4 7105:4 623..6 273	nap					ATL8C4 7105:5 147..6 106	0.84	g17096 16	42	208	5.0e- 15	richia coli] PROTEI N DISULF IDE ISOMER ASE PRECUR SOR (PDI) [Droso phila melano gaster]
170599	ATU032 539	ATL8C3 3439:3 37..44 3	nap					ATL8C3 3439:3 38..44 3	0.84	g31691 77	42	148	1.6e- 11	(AC004 401) hypoth etical protei n [Arabi dopsis thalia na]
170600	ATU032 540	ATL8C3 3570:1 ..659 3	nap					ATL8C3 3570:1 81..65 3	0.84	g23885 65	42	350	5.9e- 31	(AC000 098) Simila r to Prunus pectin estera se (gb X9 5991). [Arabi dopsis thalia na]

170601	ATU032 541	ATL8C6 049:10 91..1	nap				ATL8C6 049:10 23..94	0.83	g41765 57	42	398	2.7e- 33	(AL035 259) conser ved hypoth etical protei n [Schiz osacch aromyc es pombel]
170602	ATU032 542	ATL8C8 167:26 12..16 7	nap				ATL8C8 167:11 49..16 7	0.83	g32506 76	42	186	4.6e- 15	(AL024 486) putati ve protei n [Arabi dopsis thalia na]
170603	ATU032 543	ATL8C5 362:1. .4413	nap				ATL8C5 362:33 5..381 3	0.83	g45811 49	42	510	1.7e- 30	(AC006 919) hypoth etical protei n [Arabi dopsis thalia na]
170604	ATU032 544	ATL8C4 7667:8 64..1	nap				ATL8C4 7667:6 42..18 5	0.83	g44552 99	42	889	5.5e- 95	(AL035 528) putati ve protei n [Arabi

170605	ATU032 545	ATL8C9 414:32 6..1	nap					ATL8C9 414:32 6..36	0.83	g48952 40	42	154	1.9e- 09	dopsis thalia na] (AC007 659) unknown n protei n [Arabi dopsis thalia na]
170606	ATU032 546	ATL8C1 6792:1 771..2 688	nap					ATL8C1 6792:1 771..2 480	0.82	g35823 44	42	876	5.4e- 75	(AC005 496) putati ve cell divisi on protei n [Arabi dopsis thalia na]
170607	ATU032 547	ATL8C4 7197:1 369..6 39	nap					ATL8C4 7197:1 312..6 39	0.82	g34137 14	42	430	1.4e- 37	(AC004 747) putati ve myrosi nase- bindin g protei n [Arabi dopsis thalia na]

170608	ATU032 548	ATL8S2 7658:5 13..1	nap			ATL8S2 7658:4 72..32 1	0.82	g33783 95	42	782	1.1e- 75	(AF079 317) ferred oxin reduct ase subuni t aromat ic oxygen ase [Sphin gomona s aromat icivor ans]
170609	ATU032 549	ATL8S2 0519:5 84..1	nap			ATL8S2 0519:5 84..42	0.81	g45391 73	42	474	2.5e- 47	(AL049 485) probab le aminot ransfe rase [Strep tomyce s coelic olor]
170610	ATU032 550	ATL8S3 0989:5 55..1	nap			ATL8S3 0989:4 88..35	0.81	g16534 04	42	337	1.6e- 23	(D9091 3) hypoth etical protei n [Synec hocyst is sp.]

170611	ATU032 551	ATL8C4 5742:1 799..2 08	nap				ATL8C4 5742:1 707..6 76	0.81	g21296 09	42	249	3.0e- 23	HD-ZIP protei n - Arabid opsis thalia na [Arabi dopsis thalia na]
170612	ATU032 552	ATL8C2 5434:1 ..1263	nap				ATL8C2 5434:2 30..12 63	0.80	g45394 33	42	1588	7.7e- 122	(AL049 523) subtil isin- like protea se- like protei n [Arabi dopsis thalia na]
170613	ATU032 553	ATL8C3 9471:1 ..514	nap				ATL8C3 9471:2 68..50 3	0.80	g15637 19	42	132	9.7e- 13	(Y0832 0) cyclop hylin [Digit alis lanata]
170614	ATU032 554	ATL8C1 6893:6 83..1	nap				ATL8C1 6893:2 80..80	0.79	g28275 28	42	141	6.7e- 09	(AL021 633) predic ted protei n [Arabi

557	0637:1 ..579	ATL8C1 9169:8 39..1	nap					0637:2 62..48 0	0.77	g40068 64	42	1179	9.9e- 78	1) heat shock transc ription factor 21 [Arabi dopsis thalia na]
170618	ATU032 558	ATL8C1 9169:8 39..1	nap					ATL8C1 9169:8 21..17 1	0.77	g40068 64	42	1179	9.9e- 78	(Z9970 7) nucleo porin- like protei n [Arabi dopsis thalia na]
170619	ATU032 559	ATL8C3 685:20 52..1	nap					ATL8C3 685:20 52..22 1	0.77	g45859 36	42	2269	1.2e- 208	(AC007 211) putati ve helica se [Arabi dopsis thalia na]
170620	ATU032 560	ATL8C3 6587:1 ..1038	nap					ATL8C3 6587:2 62..67 1	0.77	g29353 42	42	276	1.2e- 20	(AF044 216) steroi d 22- alpha- hydrox ylase;

170621	ATU032 561	ATL8C2 59:23. .1372	nap				ATL8C2 59:110 9..293	0.77	g16555 36	42	927	1.4e- 80	DWF4; CYP90B 1 [Arabi dopsis thalia na]
170622	ATU032 562	ATL8C2 3623:7 92..1	nap				ATL8C2 3623:7 92..13 8	0.77	g32128 61	42	531	4.0e- 54	(Y0909 5) chlori de channe l [Arabi dopsis thalia na]
170623	ATU032 563	ATL8C4 9890:9 73..1	nap				ATL8C4 9890:9 14..44	0.77	g38595 94	42	964	1.1e- 90	(AC004 005) unknow n protei n [Arabi dopsis thalia na]
													(AF104 919) contai ns simila rity to riboso mal protei n L7Ae (Pfam: PF0124

170624	ATU032 564	ATL8S1 0925:4 09..1	nap					ATL8S1 0925:4 09..10 4	0.76	g31232 33	42	228	2.1e- 22	8, E=0.00 17, N=1) [Arabi dopsis thalia na]
170625	ATU032 565	ATL8C1 2680:1 2225.. 9751	nap					ATL8C1 2680:1 2225.. 9751	0.76	g30565 93	42	455	3.5e- 38	(AC004 255) T1F9.1 4 [Arabi dopsis thalia na]
170626	ATU032 566	ATL8C1 850:67 9..1	nap					ATL8C1 850:54 9..175	0.75	g23469 70	42	79	6.5e- 05	(AB006 597) ZPT2- 10 [Petun ia x hybrid al]
170627	ATU032 567	ATL8S2 0460:4 65..1	nap					ATL8S2 0460:3 68..15	0.75	g26423 28	42	420	2.7e- 34	(AF032 903) imidaz olone- 5-

170628	ATU032 568	ATL8C3 5035:2 361..1	nap					ATL8C3 5035:2 278..2 76	0.74	g43780 66	42	2055	1.8e- 200	(AF098 806) polypr otein [Sorgh um bicolor r]
170629	ATU032 569	ATL8C3 6044:1 404..1	nap					ATL8C3 6044:1 404..1 55	0.74	g44553 50	42	927	8.2e- 94	(AL035 524), putati ve protei n [Arabi dopsis thalia na]
170630	ATU032 570	ATL8C4 077:1. .1098	nap					ATL8C4 077:63 4..375	0.74	g45389 04	42	798	4.3e- 55	(AL049 482) cellul ase- like protei n [Arabi

170631	ATU032 571	ATL8C2 3964:1 290..1	nap					ATL8C2 3964:1 290..4 6	0.73	g45845 20	42	697	2.8e- 52	dopsis thalia na]
170632	ATU032 572	ATL8S2 7358:1 ..692	nap					ATL8S2 7358:5 8..624	0.73	g17995 74	42	376	5.5e- 40	(D9085 4) simila r to [Esche richia coli]
170633	ATU032 573	ATL8C1 3681:1 ..802	nap					ATL8C1 3681:1 3..772	0.73	g33954 40	42	441	4.9e- 47	(AC004 683) hypoth etical protei n [Arabi dopsis thalia na]
170634	ATU032 574	ATL8C2 5422:1 300..1	nap					ATL8C2 5422:1 136..3 3	0.73	g34618 41	42	739	9.9e- 76	(AC005 315) putati ve recept or protei

170635	ATU032 575	ATL8S9 289:56 8..1	nap				ATL8S9 289:20 7..88	0.73	g22449 49	42	68	1.2e- 07	n kinase [Arabi dopsis thalia na]
													(Z9733 9) simila rity to ORF - Lilium longif lorum [Arabi dopsis thalia na]
170636	ATU032 576	ATL8C1 2060:1 027..1 536	nap				ATL8C1 2060:1 027..1 461	0.73	g45824 53	42	456	2.1e- 32	(AC007 071) unknow n protei n [Arabi dopsis thalia na]
													(AL049 659) putati ve protei n [Arabi dopsis thalia na]
170637	ATU032 577	ATL8C7 24:686 ..1578	nap				ATL8C7 24:686 ..1572	0.72	g46783 48	42	554	4.0e- 62	(AL049 659) putati ve protei n [Arabi dopsis thalia na]
170638	ATU032	ATL8C3	nap				ATL8C3	0.72	g33675	42	482	4.7e-	(AC004

578	9911:6 84..27 86					9911:6 84..27 13	15				38	392) Simila r to glucos e-6- phosph ate/ph osphat e- transl ocator (GPT) gb AF0 20814 from Pisum sativu m. [Arabi dopsis thalia na]
170639	ATU032 579	ATL8C2 4745:9 59..1	nap			ATL8C2 4745:9 35..89	0.72	914036 75	42	283	1.4e- 16	(U4132 3) beta- 1,3- glucan ase [Glyci ne max]
170640	ATU032 580	ATL8S9 882:50 6..1	nap			ATL8S9 882:47 2..35	0.71	922909 89	42	574	1.1e- 51	(AF006 000) D-3- phosph oglyce rate dehydr ogenas e

170641	ATU032 581	ATL8C3 6782:2 58..79 2	nap						0.71	g27813 63	42	358	2.4e- 29	homolo g [Borde tella pertus sis] (AC003 113) F2401. 19 [Arabi dopsis thalia na]
170642	ATU032 582	ATL8S1 0510:1 ..564	nap						0.70	g29807 70	42	665	1.2e- 63	(AL022 198) putati ve protei n kinase [Arabi dopsis thalia na]
170643	ATU032 583	ATL8S3 0158:1 ..516	nap						0.70	g17090 07	42	334	1.5e- 28	O- SUCCIN YLHOMO SERINE SULFHY DRYLAS E (OSH SULFHY DRYLAS E) [Pseud omonas aerugi nosa]
170644	ATU032	ATL8C4	nap						0.69	g42042	42	147	9.9e-	(AC003

170645	ATU032 585	3892:1 634:..2 62	nap				3892:1 107:..2 68	0.69	g41153 65	42	1285	1.5e- 113	12	027) lcl pr t_seq No defini tion line found [Arabi dopsis thalia nal]
		ATL8C3 4591:2 827:..1 386					ATL8C3 4591:2 696:..1 601							(AC005 957) revers e transc riptas e-like protei n [Arabi dopsis thalia nal]
170646	ATU032 586	ATL8S2 9440:1 ..558	nap				ATL8S2 9440:8 1:..392	0.69	g40068 95	42	197	1.3e- 13		(Z9970 8) putati ve protei n [Arabi dopsis thalia nal]
170647	ATU032 587	ATL8C4 946:66 ..1133	nap				ATL8C4 946:31 0:..113 3	0.68	g42204 58	42	821	1.7e- 63		(AC006 216) Simila r to [Arabi

170648	ATU032 588	ATL8C4 9222:2 255..7 5	nap				ATL8C4 9222:2 054..7 5	0.67	g44903 28	42	739	1.3e- 55	dopsis thalia nal (AL035 656) putati ve protei n [Arabi dopsis thalia nal]
170649	ATU032 589	ATL8S9 614:40 7..1	nap				ATL8S9 614:17 0..21	0.66	g10014 09	42	92	5.9e- 05	(D6399 9) xylose repres sor [Synec hocyst is sp.]
170650	ATU032 590	ATL8C1 3700:1 18..38 1	nap				ATL8C1 3700:1 18..38 1	0.66	g23306 42	42	114	3.7e- 09	(Y1456 8) tag [Pseud omonas fluore scens]
170651	ATU032 591	ATL8C4 6735:1 498..3 31	nap				ATL8C4 6735:9 41..66 2	0.64	g42638 30	42	896	1.4e- 84	(AC006 067) hypoth etical protei n [Arabi dopsis thalia nal]
170652	ATU032 592	ATL8C3 6654:6	nap				ATL8C3 6654:6	0.64	g40975 87	42	143	1.5e- 10	(U6492 6)

170653	ATU032 593	08..1	ATL8C3 2097:1 782..3 06	nap					08..41 2	0.64	g13451 32	42	1056	5.8e- 104	NTGP5 [Nicot iana tabacu m] (U4702 9) ERECTA [Arabi dopsis thalia na]
170654	ATU032 594	ATL8C2 4655:2 250..7 15	nap						ATL8C2 4655:2 018..7 15	0.63	g48836 17	42	372	6.0e- 40	(AC006 922) unknow n protei n [Arabi dopsis thalia na]
170655	ATU032 595	ATL8S1 0901:4 65..1	nap						ATL8S1 0901:4 10..57	0.63	g29952 92	42	163	2.0e- 10	(AL022 268) putati ve two- compon ent sensor [Strep tomyce s coelic olor]
170656	ATU032 596	ATL8C2 2936:2 195..1	nap						ATL8C2 2936:2 130..2 7	0.63	g43780 66	42	1488	1.1e- 116	(AF098 806) polypr oteins [Sorgh

170657	ATU032 597	ATL8C4 3786:2 16..50 8	nap					ATL8C4 3786:3 07..47 9	0.62	g13701 52	42	97	(Z7395 4) RAB11F [Lotus japoni cus]	um bicol r]
170658	ATU032 598	ATL8S1 7376:1 ..311	nap					ATL8S1 7376:8 4..311	0.61	g19385 18	42	64	(U9701 2) short region of simila rity to solubl e epoxid e hydrol ases [Caeno rhabdi tis elegan s]	
170659	ATU032 599	ATL8C2 2190:1 ..1639	nap					ATL8C2 2190:5 50..16 21	0.61	g43888 18	42	1463	(AC006 528) putati ve pol polypr oteins with a Zn- finger CCHC type domain	

170660	ATU032 600	ATL8S2 263:40 4..1	nap					ATL8S2 263:21 8..28	0.60	g23942 84	42	176	6.8e- 14	(AF017 417) hemagg lutini n [Prevo tella interm edia]
170661	ATU032 601	ATL8C1 1168:1 ..405	nap					ATL8C1 1168:3 9..114	0.59	g45444 60	42	454	1.2e- 30	(AC006 592) putati ve revers e transc riptas e [Arabi dopsis thalia na]
170662	ATU032 602	ATL8C2 0833:1 ..924	nap					ATL8C2 0833:5 0..803	0.59	g30636 91	42	360	1.5e- 40	(AL022 537) putati ve

170663	ATU032 603	ATL8C2 6144:1 ..1673	nap					ATL8C2 6144:4 24..14 36	0.57	g45126 18	42	1076	3.4e- 117	(AC004 793) Strong simila rity to []
170664	ATU032 604	ATL8C4 9699:4 87..32 97	nap					ATL8C4 9699:4 87..29 96	0.57	g45811 64	42	817	4.6e- 58	(AC006 220) putati ve polyp rotein [Arabi dopsis thalia na]
170665	ATU032 605	ATL8C2 8458:7 37..84 8	nap					ATL8C2 8458:7 37..82 3	0.56	g22751 98	42	128	1.6e- 08	(AC002 337) hypoth etical protei n [Arabi dopsis thalia na]
170666	ATU032 606	ATL8C1 0947:3 410..1	nap					ATL8C1 0947:1 929..3 0	0.55	g40380 66, g45811 10	42, 39	73, 1434	0.057, 2.5e- 133	(AC005 897) hypoth etical protei n [Arabi dopsis

170667	ATU032 607	ATL8S9 573:59 6..1	nap					ATL8S9 573:54 9..61	0.55	g31526 52	42	204	3.7e- 11	thalia nal; (AC005 825) putati ve retrot ranspo son polypr otein [Arabi dopsis thalia nal] (AF064 870) endo- 1,3(4) -beta- glucan ase [Xanth ophyll omyces dendro rhous]
170668	ATU032 608	ATL8C2 1555:3 51..1	nap					ATL8C2 1555:3 51..85	0.55	g40637 61	42	126	8.5e- 08	(AC005 561) putati ve retrot ranspo son [Arabi dopsis thalia nal] (AC006 248)
170669	ATU032 609	ATL8C3 5948:1	nap					ATL8C3 5948:1	0.54	g43357 20	42	1278	3.5e- 72	(AC006 248)

170670	ATU032 610	944..1						944..7 09	0.54	g21297 27	42	268	2.7e- 20	putative reverse transcriptase 1 [Arabidopsis thaliana] RNA-binding protein 37 - Arabidopsis thaliana [Arabidopsis thaliana]
170671	ATU032 611	ATL8C2 085:1. .609	nap					ATL8C2 085:98 ..175	0.54	g40564 95	42	1898	1.2e- 201	(AC005 896) putative TKRP12 5 [Arabidopsis thaliana]
170672	ATU032 612	ATL8C3 94:168 0..1	nap					ATL8C3 94:168 0..97	0.54	g37575 16	42	416	2.8e- 40	(AC005 167) putative TMV resist

170673	ATU032 613	ATL8C9 405:10 6..118 3	nap				ATL8C9 405:13 3..105 6	0.53	944163 01	42	1342	2.3e- 127	ance protei n [Arabi dopsis thalia na]
170674	ATU032 614	ATL8C2 5352:1 ..1589	nap				ATL8C2 5352:2 8..143 1	0.52	948091 71	42	1818	1.6e- 104	(AF135 455) phytoc hrome A supres sor spal [Arabi dopsis thalia na]
170675	ATU032 615	ATL8S1 80:1.. 643	nap				ATL8S1 80:126 ..438	0.50	931641 42	42	475	2.4e- 46	(D7860 6) cytoch rome P450 monoox ygenase [Arabi dopsis thalia na]
170676	ATU032 616	ATL8C9 631:24	nap				ATL8C9 631:24	0.50	944553 17	42	333	3.4e- 29	(AL035 528)

170677	ATU032 617	6..164 9	nap				6..157 2	0.49	g38106 01	42	634	2.4e- 62	putative diseases resistance protein [Arabi dopsis thaliana] (AC005 398) hypothetical protein [Arabi dopsis thaliana] na]
170678	ATU032 618	ATL8C2 2478:8 41..1	nap				ATL8C1 9266:2 27..45 4	0.49	g16530 89	42	304	1.2e- 28	(D9091 1) hypothetical protein [Synec hocystis sp.]
170679	ATU032 619	ATL8C2 70:508 ..1	nap				ATL8C2 70:502 ..29	0.48	g43887 23	42	525	1.2e- 51	(AC006 413) hypothetical protein [Arabi dopsis

170680	ATU032 620	ATL8C1 6335:1 53..76 8	nap				ATL8C1 6335:1 84..60 6	0.48	g21295 84	42	713	7.1e- 65	thalia na] finger protei n - Arabid opsis thalia na retrot ranspo son Tall-1 [Arabi dopsis thalia na]
170681	ATU032 621	ATL8S1 7028:3 82..14 0	nap				ATL8S1 7028:2 95..14 0	0.47	g49030 16	42	220	4.0e- 19	(AB027 506) TSF [Arabi dopsis thalia na]
170682	ATU032 622	ATL8C4 5008:1 639..1	nap				ATL8C4 5008:1 472..3 88	0.47	g45393 57	42	2318	2.0e- 200	(AL049 525) putati ve protei n [Arabi dopsis thalia na]
170683	ATU032 623	ATL8C2 2944:1 745..1	nap				ATL8C2 2944:1 684..3 38	0.47	g29613 74	42	1019	3.6e- 77	(AL022 141) putati ve diseas e

170684	ATU032 624	ATL8S2 8721:4 76..1	nap				ATL8S2 8721:4 76..26 4	0.46	g29833 55	42	221	1.1e- 18	(AE000 707) hypoth etical protein [Aquif ex aeolic us]
170685	ATU032 625	ATL8C3 9961:1 069..1	nap				ATL8C3 9961:1 069..1 11	0.45	g36953 97	42	592	7.2e- 45	(AF096 372) No defini tion line found [Arabi dopsis thalia na]
170686	ATU032 626	ATL8C3 3332:1 698..4 237	nap				ATL8C3 3332:1 698..4 198	0.45	g38314 67, g45899 54	42, 37	1018, 241	3.6e- 95, 5.0e- 22	(AC005 700) putati ve beta- amylase [Arabi dopsis thalia na];

170687	ATU032 627	ATL8C4 8707:1 ..2122	nap						ATL8C4 8707:5 36..18 08	0.45	g35137 47	42	1640	3.0e- 166	(AC007 169) hypoth etical protei n [Arabi dopsis thalia na]
170688	ATU032 628	ATL8C1 6119:4 0..914	nap						ATL8C1 6119:4 0..323	0.44	g33778 19	42	541	3.6e- 53	(AF080 118) contai ns simila rity to revers e transc riptas es (Pfam; rvt.hm m, score: 11.19) [Arabi dopsis thalia na]
															(AF076 275) No defini tion line found [Arabi dopsis na]

170689	ATU032 629	ATL8C4 8988:1 831..1	nap				ATL8C4 8988:1 831..2 08	0.43	g43253 51	42	1096	2.0e- 106	thalia nal (AF128 394) simila r to Antirr hinum majus (garde n snapdr agon) TNP2 protei n (GB:X5 7297) [Arabi dopsis thalia nal]
170690	ATU032 630	ATL8S1 5625:1 ..535	nap				ATL8S1 5625:7 3..510	0.43	g11685 02	42	368	1.2e- 23	3- PHOSPH OSHIKI MATE 1- CARBOX YVINYL TRANSF ERASE (5- ENOLPY RUVYLS HIKIMA TE-3- PHOSPH ATE SYNTHA SE)

170691	ATU032 631	ATL8S7 62:1.. 436	nap				ATL8S7 62:198 ..58	0.43	g13972 92	42	130	3.2e- 10	(U6194 9) C. elegan s DIF- 1 protei n (PIR:S 55056) [Caeno rhabdi tis elegan s]
170692	ATU032 632	ATL8S2 6012:4 72..1	nap				ATL8S2 6012:2 69..14 4	0.42	g44173 07	42	637	2.1e- 63	(AC006 446) putati ve pol ypr otein [Arabi dopsis thalia na]
170693	ATU032 633	ATL8S2 4874:5 44..1	nap				ATL8S2 4874:4 50..28	0.42	g55986 5	42	478	1.4e- 48	(L3709 4) protea se [Barto nella bacill iforml s]

170694	ATU032 634	ATL8C2 5694:7 38..15 2	nap				ATL8C2 5694:7 38..15 2	0.42	g47739 03	42	705	1.6e- 73	(AF074 021) putati ve transp oson protei n [Arabi dopsis thalia na]
170695	ATU032 635	ATL8C4 2057:3 090..2 394	nap				ATL8C4 2057:2 755..2 394	0.41	g38602 46	42	315	1.4e- 31	(AC005 824) putati ve revers e- transc riptas e protei n [Arabi dopsis thalia na]
170696	ATU032 636	ATL8S1 7345:3 63..1	nap				ATL8S1 7345:3 06..25	0.41	g32373 13	42	324	1.4e- 29	(U9327 4) Hist [Pseud omonas aerugi nosa]
170697	ATU032 637	ATL8C3 7478:1 892..1 698	nap						g35518 38	42	230		(AF070 967) SKP1- like protei n

170698	ATU032 638	ATL8C4 5202:4 377..3 914	nap									g44553 16	42	252	5.5e- 16	[Nicotiana cleve- landii] (AL035528) putative protein [Arabidopsis thaliana] na]
170699	ATU032 639	ATL8S1 8698:1 ..243	nap									g46894 77	42	123	2.4e- 10	(AC007213) pseudogene [Arabidopsis thaliana] na]
170700	ATU032 640	ATL8C2 9578:1 864..1	nap									g45860 66	42	869	9.0e- 87	(AC006194) putative polyprotein, 3', partial [Arabidopsis thaliana] na]
170701	ATU032 641	ATL8C1 9042:5 96..1	nap									ATL8C1 9042:5 86..29	41	401	1.5e- 35	(AC007171) hypothetical protein

170702	ATU032 642	ATL8C1 9582:1 782..1	nap							g46801 83	42	525	1.5e- 45	n [Arabi dopsis thalia na]
170703	ATU032 643	ATL8C9 040:15 58..19 76	nap							g21911 48	42	237		(AF007 269) A IG00 2N01.2 8 gene produc t [Arabi dopsis thalia na]
170704	ATU032 644	ATL8C3 1577:5 188..4 463	nap							g41853 10	42	920	1.3e- 89	(AF090 446) gag protei n [Zea mays]
170705	ATU032 645	ATL8C4 3919:8 06..1	nap							g47739 18	42	231		(AF147 259) No defini tion line

170706	ATU032 646	ATL8C1 863:1. .412	nap							g46783 73	42	228	6.8e- 11	found [Arabi dopsis thalia na] (AL049 656) putati ve protei n [Arabi dopsis thalia na]
170707	ATU032 647	ATL8C3 3452:1 ..1649	nap							g49143 61	42	2145	6.2e- 215	(AC007 289) putati ve revers e transc riptas e [Arabi dopsis thalia na]
170708	ATU032 648	ATL8C1 7503:1 110..1 28	nap							g42635 22	42	850	1.6e- 86	(AC004 044) hypo thetical protei n [Arabi dopsis thalia na]
170709	ATU032 649	ATL8S1 6339:5	nap							g34452 10	42	558	4.3e- 53	(AC004 786)

170712	ATU032 652	ATL8C4 0389:4 39..1	nap										g46782 21	42	210	1.1e- 18	(AC007 135) hypoth etical protein [Arabi dopsis thalia na]
170713	ATU032 653	ATL8C1 416:95 30..73 17	nap										g45443 72	42	2227	1.7e- 232	(AC006 920) putati ve revers e transc riptas e [Arabi dopsis thalia na]
170714	ATU032 654	ATL8S5 201:1. .431	nap										g44163 03	42	569	3.4e- 37	(AF105 716) gag protei n [Zea mays]
170715	ATU032 655	ATL8C3 6630:3 87..1	nap										g26739 04	42	197	2.0e- 17	(AC002 561) hypoth etical protein [Arabi dopsis thalia na]

170716	ATU032 656	ATL8S1 639:46 7..1	nap							g16559 54	42	249	3.0e- 23	na] (U6875 9) pentae rythri tol tetran itrate reduct ase [Enter obacte r cloaca el]
170717	ATU032 657	ATL8C1 6040:1 ..1217	nap							g28800 42	42	596	2.0e- 41	(AC002 340) putati ve 3- hydrox yisobu tyryl- coenzy me A hydrol ase [Arabi dopsis thalia na]
170718	ATU032 658	ATL8C8 18:148 7..893	nap							g45672 95	42	649	5.2e- 64	(AC006 918) putati ve pol polypr otein [Arabi dopsis thalia na]

170719	ATU032 659	ATL8C8 029:1. .678	nap							g10028 00	42	239	1.3e- 25	(U3391 7) Cpm7 [Crate rostig ma planta gineum]
170720	ATU032 660	ATL8S2 905:53 6..1	nap							g10764 45	42	277	2.9e- 23	cyclin - rape [Brass ica napus]
170721	ATU032 661	ATL8C2 2240:1 ..1713	nap							g45809 90	42	571	3.3e- 50	(AF120 335) putati ve transp osase [Arabi dopsis thalia na]
170722	ATU032 662	ATL8C7 741:71 4..1	nap							g47739 13, g47739 10	42, 34	181, 348	1.9e- 17, 1.0e- 31	(AF147 259) No defini tion line found [Arabi dopsis thalia na]; (AF147 259) No defini tion

170723	ATU032 663	ATL8C4 2226:1 016..2 77	nap										g36680 81	42	156	6.5e- 14	(AC004 667) putati ve peptid ase [Arabi dopsis thalia na]
170724	ATU032 664	ATL8C3 0113:1 732..1	nap										g25831 30	42	1188	4.3e- 114	(AC002 387) putati ve revers e transc riptas e [Arabi dopsis thalia na]
170725	ATU032 665	ATL8C1 2318:1 391..1	nap										g29247 93	42	110	4.0e- 07	(AC002 334) simila r to synapt obrevi n [Arabi dopsis thalia na]

170726	ATU032 666	ATL8S1 1275:1 ..349	nap							g16517 40	42	97	0.014	(D9089 9) dimeth yladen osine transf erase [Synec hocyst is sp.]
170727	ATU032 667	ATL8C4 9438:1 718..1	nap							g25831 30	42	1086	7.2e- 94	(AC002 387) putati ve revers e transc riptas e [Arabi dopsis thalia na]
170728	ATU032 668	ATL8S2 6636:4 80..1	nap							g14952 82	42	142		(Z7192 8) hypoth etical protei n [Bacil lus subtil is]
170729	ATU032 669	ATL8C3 3186:1 082..1	nap							g11715 77, g20886 51	42, 39	75, 232	0.44, 4.2e- 24	(X9534 3) hypers ensiti vity- relate

[illegible]

170730	ATU032 670	ATL8C3 4636:1 ..913	nap							941153 76	42	464	1.3e- 31	(AC005 967) unknown protein [Arabi dopsis thalia na]
170731	ATU032 671	ATL8S6 768:30 8..104	nap							g28223 22	42	83		(AF016 485) ORF H0549 [Halob acteri um sp. NRC-1]
170732	ATU032 672	ATL8S3 946:55 4..1	nap							g46783 85	42	351	6.5e- 17	(AL049 656) putati ve

170737	ATU032 677	ATL8C3 5186:4 65..1	nap						1.00	g48743 00	41	671	1.3e- 68	(AC006 053) hypoth etical protei n [Arabi dopsis thalia na]	ory protei n kinase [Chlor obium limico la]
170738	ATU032 678	ATL8C5 693:16 0..1	nap							g45899 57	42	261		(AC007 169) unknow n protei n [Arabi dopsis thalia na]	(AC007 169) unknow n protei n [Arabi dopsis thalia na]
170739	ATU032 679	ATL8C3 7299:1 085..5 78	nap							g34510 78	42	278		(AL031 326) putati ve protei n [Arabi dopsis thalia na]	(AL031 326) putati ve protei n [Arabi dopsis thalia na]
170740	ATU032 680	ATL8C8 971:53	nap							g39293 36	42	303	1.7e- 28	BYSTIN [Mus]	BYSTIN [Mus]

170749	ATU032 689	2	ATL8S7 420:1. .634	nap								g48836 17	42	583	7.3e- 54	(AC006 922) unknown protein [Arabi dopsis thalia na]
170750	ATU032 690		ATL8S3 826:1. .229	nap								g47417 65	42	71	0.26	(AF092 738) ubiqui tously expres sed transc ript [Mus muscul us]
170751	ATU032 691		ATL8C1 2727:1 ..731	nap								g48951 78	42	160	0.086	(AC007 661) hypoth etical protei n [Arabi dopsis thalia na]
170752	ATU032 692		ATL8C4 8466:1	nap								g45394 68	42	157	2.4e- 17	(AL049 500)

170753	ATU032 693	ATL8C6 962:1. .73	nap										g34200 48	42	85	0.0004 6	(AC004 680) hypoth etical protei n [Arabi dopsis thalia na]
170754	ATU032 694	ATL8C8 043:34 84..16 27	nap										g42493 83	42	272	1.4e- 26	(AC005 966) Simila r to MADS box protei n gbL46 400 from Zea mays. [Arabi dopsis thalia na]
170755	ATU032 695	ATL8C1 4024:9 438..8 769	nap										g47739 18	42	314	3.2e- 67	(AF147 259) No defini tion

[illegible]

170756	ATU032 696	ATL8C2 2469:1 ..953	nap									g35229 31	42	991	1.3e- 92	(AC002 535) putati ve Na+/Ca 2+ exchan ger [Arabi dopsis thalia na]
170757	ATU032 697	ATL8C1 0900:3 532..4 859	nap									g22450 12	42	1787	3.7e- 125	(Z9734 1) hypoth etical protei n [Arabi dopsis thalia na]
170758	ATU032 698	ATL8C2 9704:6 71..1	nap									g33373 67	42	676	2.4e- 64	(AC004 481) hypoth etical protei n [Arabi dopsis thalia na]
170759	ATU032 699	ATL8C1 1871:1	nap									g27603 30	42	153	7.0e- 13	(AC002 130) [Arabi dopsis thalia na]

170763	ATU032 703	ATL8C3 2126:1 ..641	nap							g48503 91	42	651	1.3e- 68	(AC007 357) Identi cal to gb D78 605 cytoch rome P450 monoox ygenas e from Arabid opsis thalia na and is a member of the PF 000 67 Cytoch rome P450 family . ESTs gb Z18 072, gb Z35 218 and gb T43 466 come from this gene. []
170764	ATU032	ATL8C1	nap							g12986	42	261	2.2e-	CYTOCH

	704	4493:1 ..198								7					23	ROME B6-F COMPLE X SUBUNI T 4 (17 KD POLYPE PTIDE) [Nicot iana tabacu m]
170765	ATU032 705	ATL8S9 510:49 7..1	nap							g22261 51	42	197	3.4e- 14	(Y1408 0) hypoth etical protei n [Bacil lus subtil is]		
170766	ATU032 706	ATL8C3 6544:4 42..1	nap							g40384 81	42	156	0.0001 1	(AL021 713) DNA bindin g-like protei n [Arabi dopsis thalia na]		
170767	ATU032 707	ATL8C5 941:81 2..171	nap							g33373 49	42	653		(AC004 481) putati ve protei n		

170768	ATU032 708	ATL8C2 7965:3 43..97 1	nap								g99749	42	845	kinase [Arabi dopsis thalia na]
170769	ATU032 709	ATL8S2 6953:5 31..1	nap								g31833 87	42	257	probab le serine /threo nine- specif ic protei n kinase ATPK64 (EC 2.7.1. -) - Arabid opsis thalia na [Arabi dopsis thalia na]
														HYPOTH ETICAL 48.7 KD PROTEI N C6G10. 03C IN CHROMO SOME I [Schiz osacch aromyc

170770	ATU032 710	ATL8S4 74:455 ..1	nap										g25550 98	42	386	7.0e- 33	es pombe] (AF019 407) GTP- bindin g protei n [Caulo bacter cresce ntus]
170771	ATU032 711	ATL8C7 911:85 0..1	nap										g45103 48	42	279	3.3e- 23	(AC006 921) unknow n protei n [Arabi dopsis thalia na]
170772	ATU032 712	ATL8C7 768:80 7..276	nap										g31842 74	42	694	5.4e- 71	(AC004 136) hypoth etical protei n [Arabi dopsis thalia na]
170773	ATU032 713	ATL8S2 6838:1 90..49 2	nap										g21453 88	42	103		(Y0947 6) Yisv [Bacil lus subtil is]

170774	ATU032 714	ATL8C1 9854:8 187..7 866	nap							g43097 68	42	373	7.4e- 15	(AC006 217) putati ve Athila retroee lement ORF1 protei n [Arabi dopsis thalia na]
170775	ATU032 715	ATL8S1 2822:1 ..389	nap					ATL8S1 2822:1 23..28 8	1.00	g22449 21	41	305	7.6e- 24	(Z9733 9) hypoth etical protei n [Arabi dopsis thalia na]
170776	ATU032 716	ATL8C3 0153:7 48..30 5	nap							g33416 83	42	91	0.0039	(AC003 672) hypoth etical protei n [Arabi dopsis thalia na]
170777	ATU032 717	ATL8C1 768:1. .338	nap							g43097 03	42	350	1.0e- 28	(AC006 266) putati ve transp oson

170778	ATU032 718	ATL8C1 8876:1 802..1	nap									g45860 28	42	2125	1.1e- 213	prote n [Arabi dopsis thalia na]
170779	ATU032 719	ATL8C3 1083:1 ..1420	nap									g30470 72	42	123	8.4e- 08	(AF058 825) No defi nition line found [Arabi dopsis thalia na]
170780	ATU032 720	ATL8S2 7048:4 7..603	nap									g34452 10	42	650	7.4e- 54	(AC004 786) putati ve flavon ol 3- o- glucos

170781	ATU032 721	ATL8S2 9385:1 ..366	nap									g45444 20	42	519	4.0e- 37	(AC006 955) hypoth etical protei n [Arabi dopsis thalia na]
170782	ATU032 722	ATL8C1 5887:1 444..1 646	nap									g39803 85	42	251	6.4e- 23	(AC004 561) putati ve 18 kDa class I heat shock protei n [Arabi dopsis thalia na]
170783	ATU032 723	ATL8S2 2798:5 53..11 6	nap									g32373 29	42	367	6.8e- 34	(AF032 114) unknow n [Methy lobact erium extorq uens]

170784	ATU032 724	ATL8C2 2641:1 ..1309	nap							g21300 96	42	429	5.9e- 47	cytochrome P450tyr- sorghum [Sorghum bicolor]
170785	ATU032 725	ATL8C2 0275:2 160..2 570	nap							g34260 60	42	132	2.0e- 18	(AJ007586) src2-like protein [Arabidopsis thaliana]
170786	ATU032 726	ATL8C1 35:688 ..1	nap							g42635 45	42	463		(AC006250) putative Athila retroelement ORF1 protein [Arabidopsis thaliana]
170787	ATU032 727	ATL8C4 0535:5 64..1	nap							g44906 33	42	290	2.5e- 28	(AL035654) putative ABC transport er

170788	ATU032 728	ATL8C5 810:39 76..45 43	nap							g18715 77	42	51			ATP- bindin g protei n [Strep tomyce s coelic olor] (Y1155 3) putati ve 21kD protei n precu sor [Medic ago sativa]
170789	ATU032 729	ATL8S2 0777:5 50..21 7	nap							g40155 5	42	306	1.4e- 27		HYPOTH ETICAL 28.9 KD PROTEI N IN GIDB- UNCI INTERG ENIC REGION [Pseud omonas putida]
170790	ATU032 730	ATL8S1 3922:1	nap							g11766 33	42	134	6.3e- 11		HYPOTH ETICAL

170794	ATU032 734	ATL8S1 211:54 8..1	nap				ATL8S1 211:50 1..46	0.99	g38610 95	41	465	2.3e- 43	na] (AJ235 272) DNA REPAIR PROTEI N RADA HOMOLO G (radA) [Ricke ttsia prowaz ekil]
170795	ATU032 735	ATL8C2 4895:8 48..18 0	nap				ATL8C2 4895:8 48..18 0	0.99	g22448 60	41	437	3.8e- 46	(Z9733 7) cucumi sin [Arabi dopsis thalia na]
170796	ATU032 736	ATL8S3 948:68 9..1	nap				ATL8S3 948:63 9..22	0.99	g16540 41	41	415	3.8e- 33	(Z8136 0) hypoth etical protei n Rv1739 C [Mycob acteri um tuberc ulosis]
170797	ATU032 737	ATL8C8 917:36 91..42 11	nap				ATL8C8 917:41 94..37 68	0.98	g43357 30	41	465	6.3e- 45	(AC006 248) hypoth etical

170798	ATU032 738	ATL8C1 0397:1 763..1	nap					ATL8C1 0397:1 508..4 1	0.98	g25829 71	41	1335		protei n [Arabi dopsis thalia na]
170799	ATU032 739	ATL8C2 6194:2 117..2 28	nap					ATL8C2 6194:2 117..5 00	0.97	g13516 62	41	193	2.5e- 18	(D8371 1) TKRP12 5 [Nicot iana tabacu m] HYPOTH ETICAL 74.4 KD PROTEI N C30D11 .09 IN CHROMO SOME I [Schiz osacch aromyc es pombel] (AC000 103) F21J9. 20 [Arabi dopsis thalia na]
170800	ATU032 740	ATL8C3 0804:1 ..551	nap					ATL8C3 0804:2 40..73	0.96	g22136 28	41	232	8.7e- 23	(AC000 103) F21J9. 20 [Arabi dopsis thalia na]
170801	ATU032 741	ATL8C3 0562:5 95..37	nap					ATL8C3 0562:5 11..37	0.96	g33416 99	41	339	1.3e- 29	(AC003 672) putati

170802	ATU032 742	ATL8C4 1777:6 682..6 039	nap					ATL8C4 1777:6 624..6 039	0.96	g42622 10	41	726	3.6e- 59	(AC006 161) simila r to leucin e zipper transc riptio n factor [Arabi dopsis thalia nal]
170803	ATU032 743	ATL8S1 8888:1 ..561	nap					ATL8S1 8888:6 0..539	0.95	g37243 26	41	412	5.7e- 39	(AB012 956) unknow n [Vibri o cholerae]
170804	ATU032 744	ATL8C4 2183:1 230..1	nap					ATL8C4 2183:1 120..4 72	0.95	g28275 34	41	1020	1.6e- 81	(AL021 633) predic ted protei n [Arabi nal]

170805	ATU032 745	ATL8S2 5671:5 83..1	nap					ATL8S2 5671:5 24..42	0.95	g43781 72	41	550	2.0e- 45	dopsis thalia nal (AF102 543) argino succin ate lyase [Zymom onas mobili s]
170806	ATU032 746	ATL8C4 7141:1 ..1156	nap					ATL8C4 7141:3 32..61 0	0.94	g47339 81	41	433	5.1e- 43	(AC007 268) putati ve serine carbox ypepti dase [Arabi dopsis thalia nal]
170807	ATU032 747	ATL8S2 5463:6 54..1	nap					ATL8S2 5463:5 35..28	0.94	g29205 68	41	249	6.6e- 22	(AF027 499) Algl [Azoto bacter vinela ndil]
170808	ATU032 748	ATL8S1 6842:1 ..309	nap					ATL8S1 6842:3 3..207	0.93	g54912 4	41	172	3.5e- 15	TRNA (GUANI NE- N1)- METHYL TRANSF ERASE (MIG-

170809	ATU032 749	ATL8S1 6741:4 99..28	nap					ATL8S1 6741:4 56..28	0.93	932886 16	41	68	1.7e- 09	METHYL TRANSE ERASE) (TRNA [Salmo nella typhim urium] (AL031 013) putati ve secret ed protei n [Strep tomyce s coelic olor]
170810	ATU032 750	ATL8S1 1698:3 95..1	nap					ATL8S1 1698:3 95..35	0.93	912539 4	41	230	7.5e- 20	HOMOSE RINE KINASE (HK) [Pseud omonas aerugi nos]
170811	ATU032 751	ATL8C4 4418:1 448..2 195	nap					ATL8C4 4418:1 526..2 174	0.93	945811 67	41	1140	2.7e- 91	(AC006 220) putati ve transp oson MuDR protei n [Arabi dopsis

170812	ATU032 752	ATL8C4 3361:1 ..999	nap				ATL8C4 3361:3 69..92 8	0.92	g33353 52	41	401		thalia na] (AC004 512) Contai ns simila rity to serine /threo nine kinase homolo g PRO25 gb L04 999 from A. thalia na. EST gb Z17 531 comes from this gene. [Arabi dopsis thalia na]
170813	ATU032 753	ATL8S1 4042:5 5..513	nap				ATL8S1 4042:5 5..465	0.92	g28087 71	41	154	2.6e- 07	(AL021 411) hydrol ase [Strep tomyce s

170814	ATU032 754	ATL8C2 0481:6 76..54	nap					ATL8C2 0481:6 76..58	0.92	g30248 74	41	329	1.3e- 34	coelic olor]
170815	ATU032 755	ATL8C4 2436:1 ..889	nap					ATL8C4 2436:2 17..78 7	0.92	g42042 72	41	1021	3.3e- 74	HYPOTH ETICAL 50.0 KD PROTEI N SLR007 6 [Synec hocyst is sp.] (AC005 223) Hypoth etical protei n [Arabi dopsis thalia na]
170816	ATU032 756	ATL8C4 2073:9 71..1	nap					ATL8C4 2073:8 63..17 8	0.91	g32427 13	41	1365	6.8e- 128	(AC003 040) putati ve transp osase [Arabi dopsis thalia na]
170817	ATU032 757	ATL8S2 2287:1 ..451	nap					ATL8S2 2287:3 43..27 7	0.91	g47411 98	41	46	3.2e- 05	(AL049 746) putati ve protei n

170818	ATU032 758	ATL8S8 385:1. .402	nap					ATL8S8 385:46 ..401	0.90		g26499 78	41	256	2.1e- 22	[Arabi dopsis thalia na] (AE001 060) immuno genic protei n (bcsp3 1-2) [Archaeo globus fulgidus]
170819	ATU032 759	ATL8C4 1618:1 237..1	nap					ATL8C4 1618:1 183..5 9	0.90		g30252 99	41	866	4.8e- 87	HYPOTH ETICAL 62.3 KD PROTEI N T29M21 .25 [Arabi dopsis thalia na]
170820	ATU032 760	ATL8C2 1669:1 204..6 39	nap					ATL8C2 1669:1 152..6 39	0.89		g27387 60	41	878	4.7e- 82	(AF016 284) 5'- adenyl ylsulf ate reduct ase [Arabi dopsis thalia na]

170821	ATU032 761	ATL8C2 4829:2 253..1 446	nap				ATL8C2 4829:1 948..1 446	0.89	g37575 18	41	659	5.4e- 67	na] (AC005 167) putati ve immedi ate- early salicy late- induce d glucos yltran sferas e [Arabi dopsis thalia na]
170822	ATU032 762	ATL8C9 399:1. .1309	nap				ATL8C9 399:7. .1227	0.88	g44163 02	41	2069	3.7e- 194	(AFL05 716) copia- type pol polypr oteins [Zea mays]
170823	ATU032 763	ATL8C6 051:14 63..23 2	nap				ATL8C6 051:93 1..232	0.88	g12758 2	41	299	7.2e- 30	MYB- RELATE D PROTEI N ZM38 [Zea mays]
170824	ATU032 764	ATL8S9 752:48 1..14	nap				ATL8S9 752:47 1..14	0.88	g28086 38	41	202	2.7e- 12	(AJ001 367) small GTP-

170825	ATU032 765	ATL8C1 1019:1 993..4 17	nap					ATL8C1 1019:1 974..4 17	0.86	g41603 37	41	151	4.7e- 08	bindin g protei n [Daucu s carota]
170826	ATU032 766	ATL8S6 683:47 6..1	nap					ATL8S6 683:47 1..21	0.86	g21905 74	41	204		(AL035 216) putati ve phosph atidyl inosit ol 3- kinase [Schiz osacch aromyc es pombel] (U7536 3) cycloh exanec arboxy l-CoA dehydr ogenas e [Rhodo pseudo monas palust ris]
170827	ATU032 767	ATL8C2 7336:1 ..1155	nap					ATL8C2 7336:1 40..11 02	0.86	g45672 65	41	593		(AC006 841) putati ve

170828	ATU032 768	ATL8C2 1781:1 015..1	nap					ATL8C2 1781:6 13..18 1	0.86	943253 63	41	725	2.4e- 58	kinesi n protei n [Arabi dopsis thalia na]
170829	ATU032 769	ATL8C6 771:27 0..1	nap					ATL8C6 771:27 0..61	0.86	935488 01	41	337	7.0e- 24	(AC005 313) putati ve transm embran e protei n [Arabi dopsis thalia na]
170830	ATU032 770	ATL8C1 7651:1 ..1696	nap					ATL8C1 7651:4 1..169 3	0.85	921082 52	41	1317	9.6e- 126	(Y1022 8) P- glycop rotein -2 [Arabi

170831	ATU032 771	ATL8C1 3413:1 ..1629	nap					ATL8C1 3413:3 5..162 9	0.85	g48369 17	41	518	8.5e- 52	(AC007 153) 80099 [Arabi dopsis thalia na]
170832	ATU032 772	ATL8C2 4714:1 842..1	nap					ATL8C2 4714:1 842..3 0	0.85	g22810 90	41	627	1.1e- 44	(AC002 333) hypoth etical protei n [Arabi dopsis thalia na]
170833	ATU032 773	ATL8S1 771:52 7..1	nap					ATL8S1 771:48 2..61	0.84	g15368 31	41	564	8.6e- 54	(D8338 6) ORF5 [Shewa nella violac ea]
170834	ATU032 774	ATL8C7 005:10 69..1	nap					ATL8C7 005:93 8..10	0.84	g31834 45	41	196	6.4e- 15	HYPOTH ETICAL 30.8 KD PROTEI N IN PFHB- RPOS INTERG ENIC REGION [Esche richia

170835	ATU032 775	ATL8C1 5698:4 9..128 6	nap				ATL8C1 5698:7 0..116 7	0.83	g44671 01	41	443	1.3e- 34	coli] (AL035 538) hypoth etical protei n [Arabi dopsis thalia nal]
170836	ATU032 776	ATL8C8 442:70 3..1	nap				ATL8C8 442:69 7..3	0.83	g14028 78	41	365	8.1e- 27	(X9813 0) unknow n [Arabi dopsis thalia nal]
170837	ATU032 777	ATL8C4 2710:6 41..1	nap				ATL8C4 2710:5 85..33 6	0.82	g42040 95	41	412	9.6e- 43	(AF030 260) CYP94A 1 [Vicia sativa]
170838	ATU032 778	ATL8S5 784:31 0..1	nap				ATL8S5 784:26 2..95	0.82	g28092 56	41	419	1.3e- 38	(AC002 560) F21B7. 25 [Arabi dopsis thalia nal]
170839	ATU032 779	ATL8C1 2251:1 332..1	nap				ATL8C1 2251:1 176..2 17	0.82	g22621 16	41	1163	6.8e- 126	(AC002 343) cellul ose syntha se

170840	ATU032 780	ATL8C2 0818:1 ..1070	nap						0.81	g31525 90	41	1354	6.2e- 137	isolog [Arabi dopsis thalia nal] (AC002 986) Simila r to protei n serine /threo nine kinase NPK15 gb D31 737 from Nicoti ana tabacu m. [Arabi dopsis thalia nal]
170841	ATU032 781	ATL8C4 8292:1 ..1047	nap						0.81	g38612 14	41	160	1.8e- 11	(AJ235 272) unknow n [Ricke ttsia prowaz ekil]
170842	ATU032 782	ATL8C1 5637:6 69..1	nap						0.80	g30055 76	41	767	2.3e- 71	(AF047 718) putati ve high

170843	ATU032 783	ATL8S4 749:1. .388	nap						ATL8S4 749:44 ..388	0.80	g24953 99	41	233	5.2e- 20	affini ty nitrat e transp orter; GmNRT2 [Glyci ne max]
170844	ATU032 784	ATL8S1 2260:1 ..414	nap						ATL8S1 2260:1 07..34 3	0.80	g18773 16	41	442	1.3e- 39	(Z9277 1) hypoth etical protei n Rv3261 [Mycob acteri um tuberc ulosis]
170845	ATU032 785	ATL8C2 1864:1	nap						ATL8C2 1864:5	0.80	g44903 28	41	867	2.1e- 59	(AL035 656)

170846	ATU032 786	..2619	nap				09..22 82	0.80	g27729 00	41	215	5.4e- 20	putative protein [Arabidopsis thaliana] (AF017185) protein tyrosine phosphatase and tensin homolog/mutated in multiple advanced cancers protein [Rattus norvegicus]
170847	ATU032 787	ATL8C4 4364:1 39..13 41	nap				ATL8C4 4364:4 29..13 41	0.80	g28298 87	41	567	1.2e- 46	(AC002396) Hypothetical protein [Arabidopsis]

170848	ATU032 788	ATL8C1 5071:1 ..992	nap				ATL8C1 5071:8 7..992	0.79	g33778 34	41	1087	1.2e- 70	dopsis thalia nal (AF075 598) No defini tion line found [Arabi dopsis thalia nal]
170849	ATU032 789	ATL8C9 261:12 44..24 54	nap				ATL8C9 261:12 44..23 23	0.79	g30470 86	41	1475		(AF058 914) simila r to revers e transc riptas e (Pfam: transc ript_f act.hm m, score: 72.31) [Arabi dopsis thalia nal]
170850	ATU032 790	ATL8C1 6385:1 ..2078	nap				ATL8C1 6385:3 06..18 01	0.78	g39351 64	41	1971	1.9e- 198	(AC004 557) F17L21 .7 [Arabi dopsis thalia nal]

170851	ATU032791	ATL8C28393:50..1038	nap				ATL8C28393:224..899	0.77	g3859602	41	119	7.7e-10	thaliana (AF104919) contains similarity to human DHHC-domain containing cysteine-rich protein (GB:U90653) and several S. cerevisiae probable membrane proteins (GB:U20865, Z48758, U43491) [Arabi]
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170856	ATU032 796	69..5	nap				11..32 3	0.75	g26491 57	41	185	1.2e- 07	Similar to [Arabidopsis thaliana] (AE001006) chloride channel, putative [Archaeoglobus fulgidus] (AL050352) hypothetical protein [Arabidopsis thaliana] (AC004165) putative mitochondrial carrier protein
170857	ATU032 797	ATL8S4 406:71 2..1	nap				ATL8S4 406:64 2..16	0.75	g49144 01	41	381	2.6e- 39	
170858	ATU032 798	ATL8C2 0981:1 ..662	nap				ATL8C2 0981:5 02..66 2	0.75	g31504 04	41	192	1.7e- 11	

170859	ATU032 799	ATL8C2 771:17 82..35 9	nap				ATL8C2 771:17 38..35 9	0.75	g45586 76	41	996	3.8e-84	(AC006 586) hypoth etical protei n [Arabi dopsis thalia na]
170860	ATU032 800	ATL8C3 6459:1 ..656	nap				ATL8C3 6459:9 4..455	0.74	g34260 40	41	219	2.2e-12	(AC005 168) hypoth etical protei n [Arabi dopsis thalia na]
170861	ATU032 801	ATL8C1 8626:3 29..96 8	nap				ATL8C1 8626:6 50..85 3	0.73	g41917 80	41	904	1.7e-92	(AC005 917) putati ve cytoki nin oxidas e [Arabi dopsis thalia na]
170862	ATU032 802	ATL8C3 5701:1 390..1	nap				ATL8C3 5701:1 180..8 5	0.73	g23351 92	41	593	5.7e-57	(AF013 465) bHLH protei

170863	ATU032 803	ATL8C4 4684:5 94..1	nap					ATL8C4 4684:5 33..21 6	0.73	g33416 93	41	94	1.7e- 08	n [Arabi dopsis thalia nal] (AC003 672) unknow n protei n [Arabi dopsis thalia nal]
170864	ATU032 804	ATL8C3 2928:1 ..1264	nap					ATL8C3 2928:2 4..114 4	0.73	g44327 94	41	1557	1.8e- 161	(AC006 437) putati ve Tnp2 Tam1 transp oson protei n [Arabi dopsis thalia nal]
170865	ATU032 805	ATL8C4 3581:1 ..1576	nap					ATL8C4 3581:7 6..134 1	0.72	g31766 71	41	1288		(AC004 393) Contai ns simila rity to hypoth etical gene B0495.

170866	ATU032 806	ATL8C2 7928:8 59..1	nap						ATL8C2 7928:7 90..17 5	0.71	g11682 58	41	622			7 gb 687 822 from C. elegan s cosmid gb U21 317. [Arabi dopsis thalia na]
170867	ATU032 807	ATL8C4 4636:1 792..3 764	nap						ATL8C4 4636:2 302..3 764	0.71	g35823 20	41	110	3.1e- 07	(AC005 496) hypoth etical protei n [Arabi dopsis thalia na]	

170868	ATU032 808	ATL8S5 247:53 9..1	nap				ATL8S5 247:47 6..68	0.71	g26355 94	41	327	5.7e- 31	(Z9911 9) simila r to Na+- transp orting ATP syntha se [Bacil lus subtil is]
170869	ATU032 809	ATL8C1 7107:2 421..4 31	nap				ATL8C1 7107:2 155..4 31	0.71	g33193 60	41	1847	1.3e- 177	(AF077 408) contai ns simila rity to Vicia faba retrot ranspo son- like gene (GB:AB 007467) [Arabi dopsis thalia na]
170870	ATU032 810	ATL8S2 4306:5 15..1	nap				ATL8S2 4306:4 73..52	0.70	g12372 68	41	291	3.2e- 29	(L7626 8) eco29k IM [Esche

170871	ATU032 811	ATL8C1 3525:1 486..4 223	nap					ATL8C1 3525:1 486..3 802	0.70	g45811 64	41	622	8.6e- 54	richia coll]
170872	ATU032 812	ATL8C4 1076:1 ..1655	nap					ATL8C4 1076:8 8..384 , ATL8C4 1076:5 30..16 40	0.69, 0.55	g42063 06	41	1034	2.3e- 96	(AC006 220) putati ve polypr otein [Arabi dopsis thalia na]
170873	ATU032 813	ATL8S2 6393:2 68..1	nap					ATL8S2 6393:2 68..86	0.68	g24942 80	41	225		(AF049 110) prpol [Zea mays]
170874	ATU032 814	ATL8C4 8889:1 421..1	nap					ATL8C4 8889:1 325..1 95	0.68	g46461 96	41	1312	8.7e- 134	ELONGA TION FACTOR TS (EF- TS) [Synec hocyst is sp.]
170875	ATU032	ATL8C1	nap					ATL8C1	0.68	g43357	41	1816	5.0e-	(AC007 230) Contai ns simila rity to F13P17 .8 []
														(AC006

170876	815	8291:2 84..17 86	nap	ATL8C4 9007:1 ..839	ATL8C4 9007:1 5..839	0.68	g32490 83	41	311	9.0e- 28	248) putati ve revers e transc riptas e Tal- 1 [Arabi dopsis thalia na]

170877	ATU032 817	ATL8C1 8181:1 74..11 32	nap					ATL8C1 8181:1 74..10 39	0.68	g45811 43	41	181	1.6e- 20	dopsis thalia nal (AC006 919) hypoth etical protei n [Arabi dopsis thalia nal]
170878	ATU032 818	ATL8C2 24:1.. 1029	nap					ATL8C2 24:65.. .875	0.67	g43357 51	41	995	2.6e- 106	(AC006 284) putati ve methyl transf erase [Arabi dopsis thalia nal]
170879	ATU032 819	ATL8S2 1964:7 3..561	nap					ATL8S2 1964:7 3..504	0.67	g45857 95	41	404	6.0e- 37	(AJL31 715) DnrD protei n [Pseud omonas stutze ri]
170880	ATU032 820	ATL8C5 0171:1 ..599	nap					ATL8C5 0171:1 07..58 2	0.66	g32617 24	41	277	1.7e- 19	(Z9277 2) hypoth etical protei n Rv0647

170881	ATU032 821	ATL8C2 3689:1 076..1	nap					ATL8C2 3689:9 78..11 7	0.66	g32928 25	41	714	2.7e- 64	[Mycob acteri um tuberc ulosis]
170882	ATU032 822	ATL8C4 8529:1 62..12 60	nap					ATL8C4 8529:1 62..10 78	0.66	g45860 53	41	1001	3.6e- 97	(AC007 020) putati ve lacass e [Arabi dopsis thalia na]
170883	ATU032 823	ATL8C5 447:1. .750	nap					ATL8C5 447:60 4..727	0.66	g30055 76	41	876	5.6e- 85	(AF047 718) putati ve high affini ty nitrat e transp orter; GmNRT2 [Glyci

170884	ATU032 824	ATL8C4 5728:1 ..1673	nap					ATL8C4 5728:1 082..1 456	0.66	g27087 43	41	1807	4.0e- 168	ne max] (AC003 952) putati ve Tal-1- like revers e transc riptas e [Arabi dopsis thalia na]
170885	ATU032 825	ATL8C4 6034:3 48..85 8	nap					ATL8C4 6034:3 48..61 8	0.66	g30687 05	41	82	1.6e- 06	(AF049 236) unknow n [Arabi dopsis thalia na]
170886	ATU032 826	ATL8S2 6107:1 ..391	nap					ATL8S2 6107:8 7..370	0.64	g48952 39	41	350	2.3e- 18	(AC007 659) hypothe tical protei n [Arabi dopsis thalia na]
170887	ATU032 827	ATL8C4 064:1. ..1419	nap					ATL8C4 064:16 5..118 2	0.64	g47339 78	41	1453	7.8e- 143	(AC007 264) hypothe tical protei

170888	ATU032 828	ATL8C4 6575:1 645..7 0	nap					ATL8C4 6575:1 591..7 0	0.64	g45859 11	41	909	1.6e- 81	n [Arabi dopsis thalia na]
170889	ATU032 829	ATL8C2 4826:1 ..1307	nap					ATL8C2 4826:1 13..13 07	0.63	g30565 86	41	1416	1.1e- 141	(AC004 255) TIF9.7 [Arabi dopsis thalia na]
170890	ATU032 830	ATL8C6 391:13 95..15 5	nap					ATL8C6 391:12 69..20 6	0.63	g37383 37	41	842	2.2e- 110	(AC005 170) putati ve revers e transc riptas e [Arabi dopsis thalia na]
170891	ATU032 831	ATL8C4 0504:6 67..10 43	nap					ATL8C4 0504:8 67..71 5	0.63	g32362 56	41	627	1.3e- 49	(AC004 684) putati ve zinc

170892	ATU032 832	ATL8C4 5461:9 46..1	nap				ATL8C4 5461:6 08..69	0.63	g45862 58	41	369	5.9e- 29	(AL049 640) putati ve protei n [Arabi dopsis thalia na]
170893	ATU032 833	ATL8C1 3245:1 ..1326	nap				ATL8C1 3245:4 7..926	0.63	g42042 78	41	876	1.4e- 72	(AC004 146) putati ve Cytoch rome P450 protei n [Arabi dopsis thalia na]
170894	ATU032 834	ATL8C8 341:1. .1175	nap				ATL8C8 341:70 ..434	0.63	g38853 39	41	1256	2.1e- 122	(AC005 623) putati ve bzip protei n [Arabi dopsis thalia na]

170895	ATU032 835	ATL8S2 4646:1 ..511	nap				ATL8S2 4646:1 03..39 3	0.62	926130 96	41	85	0.0059	na] (AF030 344) tetrac ycline _resist ance determ inant tetv [Mycob acteri um smegma tis]
170896	ATU032 836	ATL8S2 1330:1 ..595	nap				ATL8S2 1330:3 38..15 4	0.62	945120 08	41	188	7.2e- 18	(AF104 912) UDP- Gal::u ndecap renolp hospha te Gal-1- P transf erase Wbap [Esche richia coli]
170897	ATU032 837	ATL8S2 8924:1 ..522	nap				ATL8S2 8924:8 4..515	0.61	923267 32	41	310	1.9e- 27	(Z9826 8) tyrS [Mycob acteri um tuberc ulosis

170898	ATU032 838	ATL8S7 792:1. .596	nap				ATL8S7 792:15 ..444	0.61	g14057 56	41	786	1.6e- 49	(Z7441 0) hycQ [Mycob acteri um tuberc ulosis]
170899	ATU032 839	ATL8C4 1043:8 26..1	nap				ATL8C4 1043:7 81..35 3	0.61	g33778 53	41	188	2.6e- 15	(AF076 274) No defini tion line found [Arabi dopsis thalia na]
170900	ATU032 840	ATL8C3 6391:5 00..1	nap				ATL8C3 6391:2 79..22	0.61	g30252 38, g11639 27	41, 36	114, 81	6.8e- 08, 6.3e- 07	HYPOTH ETICAL OXIDOR EDUCTA SE IN MEAA 3'REGI ON (ORFC) [Methy lobact erium extorq uens]; (U4370 4) ketore ductas e

170901	ATU032 841	ATL8C3 7343:1 169..1	nap						ATL8C3 7343:1 169..3 33	0.60	g44172 74	41	818		[Strep tomyce s sp. C5] (AC007 019) hypoth etical protei n [Arabi dopsis thalia na]
170902	ATU032 842	ATL8S3 0739:1 ..601	nap						ATL8S3 0739:8 3..428	0.60	g41732 8	41	268	1.5e- 24	UDP-N- ACETYL MURAMO YLALAN YL-D- GLUTAM ATE-- 2,6- DIAMIN OPIMEL ATE LIGASE (UDP- N- ACETYL MURAMY L- TRIEP TIDE SYNTH E) [Bacil lus subtil is]
170903	ATU032	ATL8C1	nap						ATL8C1	0.60	g42204	41	487	5.2e-	(AC006

170906	ATU032 846	ATL8C2 2092:1 594..9 07	nap					ATL8C2 2092:1 545..9 07	0.59	g13619 82	41	653	2.2e- 61	4- coumarate-- CoA ligase (EC 6.2.1. 12) - Arabidopsis thaliana [Arabidopsis thaliana na]
170907	ATU032 847	ATL8C1 1347:1 ..1172	nap					ATL8C1 1347:7 15..90 6	0.59	g36953 81	41	157	1.5e- 09	(AF096370) contains similarity to Arabidopsis thaliana reverse- transcriptase

170908	ATU032 848	ATL8C4 9648:3 72..95 9	nap					ATL8C4 9648:5 30..60 2	0.59	g42621 73	41	120	1.3e- 06	(AC005 508) 3975 [Arabi dopsis thalia na]
170909	ATU032 849	ATL8S7 744:27 0..1	nap					ATL8S7 744:20 0..87	0.57	g37383 26	41	98	1.5e- 05	(AC005 170) putati ve noduli n [Arabi dopsis thalia na]
170910	ATU032 850	ATL8S3 0395:7 9..500	nap					ATL8S3 0395:3 59..25 5	0.56	g47491 5	41	212	1.0e- 17	(X7896 9) orf 337; transl ated orf simila rity to SW: BCR_EC OLI bicycl omycin resist ance protei

170911	ATU032 851	ATL8C2 8260:8 31..1	nap					ATL8C2 8260:5 89..9	0.56	g24627 53	41	651	2.6e- 51	n of Escher ichia coli [Coxie lla burnet ii]
170912	ATU032 852	ATL8C4 0634:5 86..1	nap					ATL8C4 0634:4 96..20 9	0.56	g23528 12	41	196	7.4e- 24	(AF008 597) desace toxyvi ndolin e-4- hydrox ylase [Catha ranthu s roseus]
170913	ATU032 853	ATL8C2 8712:1 ..718	nap					ATL8C2 8712:7 3..704	0.56	g44552 92	41	330	4.7e- 21	(AI035 528) putati ve protei n [Arabi dopsis

170914	ATU032 854	ATL8S1 7432:6 00..22 0	nap				ATL8S1 7432:4 95..26 6	0.55	g45126 23	41	247	1.4e- 25	thalia nal (AC004 793) Contai ns simila rity to [Arabi dopsis thalia nal]
170915	ATU032 855	ATL8S2 0479:4 00..1	nap				ATL8S2 0479:4 00..22	0.55	g26876 26	41	210	2.2e- 18	(AF034 855) ORF13 [Agrob acteri um tumefa ciens]
170916	ATU032 856	ATL8S7 862:1. .598	nap				ATL8S7 862:60 ..230	0.55	g22449 05	41	817	2.4e- 67	(Z9733 9) indole -3- acetat e beta- glucos yltran sferas e [Arabi dopsis thalia nal]
170917	ATU032 857	ATL8C3 4854:1 ..826	nap				ATL8C3 4854:7 5..809	0.55	g32362 53	41	1074	1.7e- 96	(AC004 684) recept or-

170921	ATU032 861	ATL8C2 6416:1 ..836	nap				ATL8C2 6416:6 6..818	0.53	g29795 43	41	767	6.7e- 80	(AC003 680) hypoth etical protei n [Arabi dopsis thalia na]
170922	ATU032 862	ATL8C7 007:12 31..19 7	nap				ATL8C7 007:11 81..19 7	0.52	g29824 64	41	374	7.6e- 44	(AL022 223) putati ve protei n [Arabi dopsis thalia na]
170923	ATU032 863	ATL8C1 3488:6 9..791	nap				ATL8C1 3488:2 41..71 4	0.51	g32818 64	41	904	4.7e- 68	(AL031 004) putati ve protei n [Arabi dopsis thalia na]
170924	ATU032 864	ATL8C7 88:1.. 1555	nap				ATL8C7 88:14. .1487	0.51	g28282 80	41	2204	2.7e- 129	(AL021 687) putati ve protei n [Arabi dopsis thalia na]

170925	ATU032 865	ATL8S1 5013:1 ..638	nap			ATL8S1 5013:3 9..458	0.50	g28298 84	41	450	6.7e- 46	(AC002 396) Hypoth etical protei n [Arabi dopsis thalia na]
170926	ATU032 866	ATL8C4 5348:1 16..19 73	nap			ATL8C4 5348:1 16..15 71	0.50	g45859 85	41	1265	1.5e- 126	(AC005 287) Hypoth etical protei n [Arabi dopsis thalia na]
170927	ATU032 867	ATL8C4 2855:1 ..1265	nap			ATL8C4 2855:4 4..124 7	0.49	g46801 83	41	450	3.3e- 46	(AF111 709) gag- pol protei n [Oryza sativa subsp. indica]
170928	ATU032 868	ATL8C1 5994:1 ..908	nap			ATL8C1 5994:1 38..90 8	0.49	g22447 81	41	1457	1.2e- 112	(Z9733 5) hypoth etical protei n [Arabi dopsis thalia

170929	ATU032 869	ATL8C1 2862:3 722..1	nap				ATL8C1 2862:1 602..6 5	0.48	g48369 17	41	673	1.9e- 63	na] (AC007 153) 80099 [Arabi dopsis thalia na]
170930	ATU032 870	ATL8C3 8719:1 ..700	nap				ATL8C3 8719:4 92..68 3	0.48	g17434 12	41	396	1.2e- 33	(Y0982 6) amino acid transp orter [Solan um tubero sum]
170931	ATU032 871	ATL8C8 706:82 9..524	nap				ATL8C8 706:64 6..566	0.45	g47261 16	41	241	1.1e- 20	(AC006 436) hypoth etical protei n [Arabi dopsis thalia na]
170932	ATU032 872	ATL8C3 192:35 9..124 9	nap				ATL8C3 192:44 4..124 9	0.45	g44553 19	41	1027	1.3e- 95	(AL035 528) putati ve diseas e resist ance protei n [Arabi dopsis na]

170933	ATU032 873	ATL8S3 0611:4 59..1	nap				ATL8S3 0611:4 57..19	0.45	g11765 94	41	377	1.4e- 32	thalia na]
170934	ATU032 874	ATL8C2 4823:1 089..8 1	nap				ATL8C2 4823:1 006..2 00	0.44	g33353 46	41	345	4.5e- 23	(AC004 512) Contai ns simila rity to TMV resist ance protei n N gb U15 605 from Nictia na glutin osa. [Arabi dopsis thalia na]
170935	ATU032 875	ATL8S2 3260:5	nap				ATL8S2 3260:5	0.44	g26513 07	41	637	4.7e- 65	(AC002 336)

170936	ATU032 876	68..1	nap					14..15	0.43	gl7885 79	41	70	0.0007 8	putative uroporphyrinogen decarboxylase [Arabidopsis thaliana]
	ATL8S9 200:52 6..1							ATL8S9 200:43 4..50						(AE000314) putative transport orthoprotein [Escherichia coli]
170937	ATU032 877	ATL8C3 5591:1 ..727	nap					ATL8C3 5591:6 2..712	0.42	gl6577 82	41	668	6.3e- 64	(U72645) transcriptio nal activa tor TbuT [Ralstonia pickettii]
170938	ATU032 878	ATL8C4 8836:1 24..18 43	nap					ATL8C4 8836:1 39..84 3	0.42	gl8711 85	41	145	8.7e- 13	(U90439) seven in absent

170939	ATU032 879	ATL8C4 8892:1 359..2 417	nap					ATL8C4 8892:1 359..2 102	0.42	g42043 03	41	970	5.5e- 81	(AC003 027) lcl pr t_seq No defini tion line found [Arabi dopsis thalia na]
170940	ATU032 880	ATL8C2 5273:1 071..1	nap					ATL8C2 5273:9 90..63	0.42	g45393 94	41	496	6.4e- 50	(AL035 526) putati ve protei n [Arabi dopsis thalia na]
170941	ATU032 881	ATL8C1 1231:7 02..1	nap					ATL8C1 1231:5 33..16 8	0.42	g33344 41	41	415	1.8e- 38	HYPOTH ETICAL 47.9 KD PROTEI N T5I7.9 IN CHROMO SOME II

170942	ATU032 882	ATL8C1 5379:1 ..704	nap					ATL8C1 5379:1 92..70 4	0.42		g19452 83	41	198	4.5e- 20	[Arabi dopsis thalia na] (Y1135 1) myb factor [Oryza sativa]
170943	ATU032 883	ATL8C3 8304:1 ..1663	nap					ATL8C3 8304:6 5..157 3	0.41		g27087 43	41	1391	3.0e- 144	(AC003 952) putati ve Tal-1- like revers e transc riptas e [Arabi dopsis thalia na]
170944	ATU032 884	ATL8S2 7065:1 41..54 8	nap					ATL8S2 7065:2 40..42 7	0.41		g44067 85	41	69	1.6e- 09	(AC006 532) hypo thetical protei n [Arabi dopsis thalia na]
170945	ATU032 885	ATL8C4 9113:4 11..1	nap					ATL8C4 9113:4 11..14 6	0.40		g30373 6	41	282	1.1e- 27	(D1254 1) GTP- bindin g

170946	ATU032 886	ATL8C4 6213:1 70..15 87	nap											g36500 35	41	1872	1.9e- 183	(AC005 396) putati ve revers e transc riptas e [Arabi dopsis thalia nal]
170947	ATU032 887	ATL8C1 1493:9 51..1	nap											g45811 55	41	1270	2.0e- 121	(AC006 919) putati ve recept or kinase [Arabi dopsis thalia nal]
170948	ATU032 888	ATL8S4 931:86 ..623	nap											g39534 60	41	146	7.5e- 06	(AC002 328) F20N2. 5 [Arabi dopsis thalia nal]
170949	ATU032 889	ATL8S1 210:1. .654	nap											g43097 56	41	619	4.4e- 63	(AC006 217) putati

170950	ATU032 890	ATL8C4 2473:1 ..201	nap							g29824 35	41	142	2.6e- 08	(AI022 224) retrot ranspo son like protei n (fragm ent) [Arabi dopsis thalia nal]
170951	ATU032 891	ATL8S5 701:48 9..1	nap							g26239 72	41	563	3.3e- 45	(AJ002 316) putati ve acyl- CoA dehydr ogenas e [Acine tobact er sp. ADP1]
170952	ATU032 892	ATL8S1 1955:1 ..599	nap							g29840 81	41	522	2.4e- 50	(AE000 756) transc riptio nal regula

170953	ATU032 893	ATL8C1 6807:2 28..1	nap									g25296 74	41	342	7.8e- 20	(AC002 535) hypoth etical protei n [Arabi dopsis thalia na]	tor (NtrC family) [Aquif ex aeolic us]
170954	ATU032 894	ATL8C4 2109:1 ..833	nap									g41153 62	41	972	2.5e- 97	(AC005 957) hypoth etical protei n [Arabi dopsis thalia na]	(AC005 957) hypoth etical protei n [Arabi dopsis thalia na]
170955	ATU032 895	ATL8C4 6316:1 919..1	nap									g24941 31	41	2655	8.2e- 280	(AC002 376) Strong simila rity to Lycope rsicon aldehy de oxidas e	(AC002 376) Strong simila rity to Lycope rsicon aldehy de oxidas e

170956	ATU032 896	ATL8C1 4026:1 353..1 83	nap								g40564 28	41	990	4.6e- 78	(gb U8 2559). [Arabi dopsis thalia na] (AC005 322) Simila r to gb U43 629 integr al membra ne protei n from Beta vulgar is and a member of sugar transp orter family PF1000 83. [Arabi dopsis thalia na]
170957	ATU032 897	ATL8C1 4037:6 27..1	nap								g13127 6	41	671	1.1e- 26	PHOTOS YSTEM II P680 CHLORO PHYLL

170958	ATU032 898	ATL8S1 9505:3 17..1	nap										g42204 82	41	175	0.0067	A APOPRO TEIN (CP-47 PROTEI N) [Nicot iana tabacu m] (AC006 069) hypoth etical protei n [Arabi dopsis thalia na]
170959	ATU032 899	ATL8C4 6570:6 84..13 83	nap										g22136 12	41	176	4.7e- 11	(AC000 103) F21J9. 6 [Arabi dopsis thalia na]
170960	ATU032 900	ATL8S8 71:1.. 435	nap										g44173 07	41	619	1.0e- 57	(AC006 446) putati ve pol polypr otein [Arabi dopsis thalia na]
170961	ATU032 901	ATL8S2 5615:1	nap										g45845 44	41	817	1.1e- 08	(AL049 608)

170962	ATU032 902	..519	nap							g45444 33	41	39	0.57	(AC006 955) hypoth etical protei n [Arabi dopsis thalia na]
170963	ATU032 903	ATL8C4 1838:1 080..2 35	nap							g44173 08	41	126		(AC006 446) putati ve pol polypr otein with revers e transc riptas e domain [Arabi dopsis thalia na]
170964	ATU032 904	ATL8S1 8716:1 ..531	nap							g44550 83	41	151	2.5e- 12	(AF119 621) unknow n

170965	ATU032 905	ATL8S2 7055:1 ..410	nap							g46782 07	41	147	1.1e- 06	(AC007 134) putati ve revers e transc riptas e [Arabi dopsis thalia na]
170966	ATU032 906	ATL8C1 5668:7 3..544	nap							g28275 43	41	335	1.6e- 36	(AL021 635) predic ted protei n [Arabi dopsis thalia na]
170967	ATU032 907	ATL8S1 986:1. .157	nap							g33554 83	41	74	7.3e- 06	(AC004 218) gibber ellin- regula ted protei n (GASA5)~like [Arabi dopsis

170968	ATU032 908	ATL8C5 807:11 55..49 8	nap									41	g10854 32	145		thalia na] mucin (clone PGM- 2A) - pig [Sus scrofa]
170969	ATU032 909	ATL8C4 0704:1 ..285	nap									41	g21297 52	99	8.3e- 07	thiore doxin - Arabid opsis thalia na [Arabi dopsis thalia na]]
170970	ATU032 910	ATL8C3 1868:1 ..660	nap									41	g48357 80	1047	4.8e- 105	(AC007 296) Strong simila rity to gb AF0 49347 berber ine bridge enzyme from Berber is stolon ifera. [Arabi dopsis

170971	ATU032 911	ATL8C2 2237:1 ..463	nap										g38643 3	41	112	0.93	thalia nal (S6294 1) Ps 2=basi C prolin e-rich protei n(PRB1 L precur sor protei n=basi C prolin e-rich protei ns (Ps, PmF, PmS, and Pe) precur sor) {C- termin al} [Homo sapien s]
170972	ATU032 912	ATL8C2 3272:1 156..1	nap										g32830 26	41	279	4.7e- 36	(AF051 562) putati ve transp osase [Arabi

170973	ATU032 913	ATL8C3 4600:1 318..1 978	nap								g45585 58	41	767	2.1e- 57	dopsis thalia nal (AC007 138) putati ve polyga lactur onidas e [Arabi dopsis thalia nal]
170974	ATU032 914	ATL8C3 4696:9 39..53 7	nap								g45860 69	41	169	2.2e- 20	(AC006 194) hypoth etical protei n [Arabi dopsis thalia nal]
170975	ATU032 915	ATL8C2 0816:6 95..1	nap								g49143 58	41	497	1.6e- 43	(AC007 289) hypoth etical protei n [Arabi dopsis thalia nal]
170976	ATU032 916	ATL8C3 6689:1 745..1	nap								g31766 64	41	102	9.1e- 08	(AC004 393) Contai ns simila

170979	ATU032 919	ATL8C4 528:63 9..86	nap							g28092 51	41	461	1.1e- 48	(AC002 560) F21B7. 20 [Arabi dopsis thalia na]
170980	ATU032 920	ATL8C3 6624:5 228..4 121	nap							g41153 62	41	967	3.9e- 100	(AC005 957) hypoth etical protei n [Arabi dopsis thalia na]
170981	ATU032 921	ATL8S1 6772:2 34..1	nap							g34931 31	41	151	3.3e- 13	(AF081 570) thymid ylate kinase [Arabi dopsis thalia na]
170982	ATU032 922	ATL8C6 469:24 6..190 0	nap							g45126 97	41	240	3.5e- 23	(AC006 569) unknow n protei n [Arabi dopsis thalia na]
170983	ATU032 923	ATL8S2 2933:1	nap							g13012 0,	41, 31	160, 162	3.2e- 11,	PHOSPH ATE

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100

170984	ATU032 924	ATL8C1 9779:1 ..631	nap							g21206 27				8.0e- 15	REGULO N TRANSC RIPTIO NAL REGULA TORY PROTEI N PHOB []; negati ve regula tor PhoU - Pseudo monas aerugi nosa [Pseud omonas aerugi nosa]
										g42204 47	41	340	2.5e- 31	(AC006 216) Strong simila rity to gb X74 814 cafeic acid 3-O- methyl transf erase from Eucaly ptus	

170987	ATU032 927	ATL8C6 51:156 9..1	nap							g47739 10	41	229	6.2e- 20	(AF147 259) No defini tion line found [Arabi dopsis thalia nal]
170988	ATU032 928	ATL8C3 7872:9 14..1	nap							g33675 77	41	608	2.0e- 56	(AL031 135) putati ve protei n [Arabi dopsis thalia nal]
170989	ATU032 929	ATL8S2 4013:1 ..426	nap							g18276 81	41	421	7.7e- 42	Chain A, Acidot hermus Cellul olytic us Endoce llulas e E1 Cataly tic Domain In Comple x With A Cellot etraos

170990	ATU032 930	ATL8S1 9048:5 08..1	nap				ATL8S1 9048:4 22..52	1.00	g22763 34	40	409	8.0e- 38	(Z9799 1) aspC [Mycob acteri um tuberc ulosis]
170991	ATU032 931	ATL8C4 7875:1 574..1	nap						g45393 57	41	2042	1.0e- 200	(AL049 525) putati ve protei n [Arabi dopsis thalia na]
170992	ATU032 932	ATL8C4 4778:4 584..3 249	nap						g21296 18	41	735	4.8e- 82	hypoth etical protei n 1 - Arabid opsis thalia na retrot ranspo son Athila [Arabi dopsis thalia na]
170993	ATU032 933	ATL8S4 23:1.. 645	nap						g39129 98	41	130	6.1e- 12	FLORAL HOMEOT IC PROTEI

170994	ATU032 934	ATL8C1 6578:1 310..5 38	nap										g21300 96	41	646	2.3e- 68	N AGL8 [Arabi dopsis thalia na] cytoch rome P450ty r - sorghu m [Sorgh um bicolo r]
170995	ATU032 935	ATL8C4 4764:1 ..536	nap										g41057 98	41	119	4.6e- 15	(AF049 930) PGP237 -11 [Petun ia x hybrid a]
170996	ATU032 936	ATL8C2 1451:1 016..1 80	nap										g45444 04	41	1257	9.7e- 80	(AC007 047) unknow n protei n [Arabi dopsis thalia na] (D7860 1) cytoch rome P450 monoox ygenas
170997	ATU032 937	ATL8S6 627:1. .613	nap										g31641 32	41	477		

170998	ATU032 938	ATL8S2 8388:5 82..17 1	nap							g11719 10	41	148	2.4e- 12	OLIGOP EPTIDE TRANSP ORT ATP- BINDIN G PROTEI N OPF [Haemo philus influe nzae Rd]	e [Arabi dopsis thalia na]
170999	ATU032 939	ATL8C4 0427:6 66..38 1	nap							g20621 74	41	208	1.5e- 17	(AC001 645) transc riptio n factor (TINY) isolog [Arabi dopsis thalia na]	(Arabi dopsis thalia na]
171000	ATU032 940	ATL8C4 4601:1 ..457	nap							g41027 25	41	94	1.8e- 09	(AF015 785) TATA- box bindin g protei n [Phase	(AF015 785) TATA- box bindin g protei n [Phase

171001	ATU032 941	ATL8C1 294:84 9..196 5	nap							g42636 58	41	432	6.0e- 42	(AC006 136) hypoth etical protei n [Arabi dopsis thalia nal]	olus vulgar is]
171002	ATU032 942	ATL8S2 8728:1 ..565	nap							g39280 77	41	492	4.3e- 40	(AC005 770) hypoth etical protei n [Arabi dopsis thalia nal]	
171003	ATU032 943	ATL8S1 1228:5 43..1	nap							g17108 39	41	549	4.7e- 48	ADENOS YLHOMO CYSTEI NASE (S- ADENOS YL-L- HOMOCY STEINE HYDROL ASE) (ADOHC YASE) [Mus muscul us]	
171004	ATU032	ATL8C3	nap							g46801	41	650	3.8e-	(AF111	

171005	944	0491:1 802..1	nap						79				40	709) polypr otein [Oryza sativa subsp. indica]
	ATU032 945	ATL8C1 7160:8 32..10 16	nap						932491 12	41	282		4.le- 13	(AC003 114) Contai ns simila rity to transc riptio n factor Jun-D gb X60 063 from Gallus gallus . [Arabi dopsis thalia na]
171006	ATU032 946	ATL8C4 9891:1 ..477	nap						944067 85	41	96		9.9e- 13	(AC006 532) hypo thetical protein [Arabi dopsis thalia na]

171007	ATU032 947	ATL8C2 1185:8 78..1	nap						922135 90	41	361	1.1e- 38	(AC000 348) T7N9.1 0 [Arabi dopsis thalia na]
171008	ATU032 948	ATL8S2 906:73 0..1	nap						g45859 14	41	429	4.2e- 36	(AC006 298) putati ve MuDR MURA transp osase [Arabi dopsis thalia na]
171009	ATU032 949	ATL8S6 883:42 4..597	nap						g47339 62	41	126		(AC007 261) unknow n protei n [Arabi dopsis thalia na]
171010	ATU032 950	ATL8C6 15:1.. 228	nap						g33273 97	41	331	1.0e- 28	(AC004 483) Athila retro ement ORF1- like protei n [Arabi

171011	ATU032 951	ATL8C1 3500:2 240..2 681	nap									g45862 57	41	295	4.2e- 31	dopsis thalia na] (AL049 640) putati ve protei n [Arabi dopsis thalia na]
171012	ATU032 952	ATL8S2 735:55 9..283	nap									g24989 99	41	115	1.5e- 09	THIAM N- PHOSPH ATE PYROPH OSPHOR YLASE (TMP PYROPH OSPHOR YLASE) (TMP- PPASE) (THIAM IN- PHOSPH ATE SYNTHA SE) [Haemo philus influe nzae Rd]
171013	ATU032 953	ATL8C3 0558:1 076..1	nap									g45393 94	41	467	8.5e- 44	(AL035 526) putati

171014	ATU032 954	ATL8C1 4824:4 162..2 921	nap							922136 12	41	202	5.5e- 14	ve n [Arabi dopsis thalia na] (AC000 103) F21J9. 6 [Arabi dopsis thalia na]
171015	ATU032 955	ATL8S2 9436:5 36..1	nap							941755 7	41	568	4.8e- 56	PHOSPH ORIBOS YLAMIN E-- GLYCIN E LIGASE (GARS) (GLYCI NAMIDE RIBONU CLEOTI DE SYNTH TASE) (PHOSP HORIBO SYLGly CINAMI DE SYNTH TASE) [Esche richia coli]

171016	ATU032 956	ATL8S2 9459:3 18..1	nap						g22390 60	41	283	6.0e- 22	(Y1022 3) B- ketoal- dipate enol- lacton e hydrol ase [Brady rhizob ium japoni cum]
171017	ATU032 957	ATL8C2 7697:5 13..76	nap						g47551 96	41	162		(AC007 018) simila r to the GDSL family of lipoly tic enzyme s [Arabi dopsis thalia na]
171018	ATU032 958	ATL8C3 7595:1 231..1	nap						g45390 03	41	492	3.0e- 38	(AL049 481) putati ve protei n [Arabi dopsis thalia na]

171019	ATU032 959	ATL8S2 9796:4 42..1	nap							g24940 60	41	172	1.7e- 13	LINOLE OYL- COA DESATU RASE (DELTA (6) - DESATU RASE) [Synec hocyst is sp.]
171020	ATU032 960	ATL8S2 2018:1 ..476	nap							g26327 07	41	328	8.4e- 31	(Z9910 6) altern ate gene name: ycsH; simila r to branch ed chain amino acids transp orter [Bacil lus subtil is]
171021	ATU032 961	ATL8C3 0267:3 91..21 2	nap							g21042 96	41	172	0.0003 3	(Z9538 7) hypoth etical protei n Rv2617

																		C [Mycobacterium tuberculosis]
171022	ATU032 962	ATL8C4 3715:3 082..4 634	nap										g45394 06	41	1993			(AL049524) putative retrotransposon [Arabidopsis thaliana]
171023	ATU032 963	ATL8C4 2271:2 807..1 013	nap										g43372 06	41	113	4.4e-07		(AC006403) putative replication factor -A protein [Arabidopsis thaliana]
171024	ATU032 964	ATL8C8 441:49 7..636	nap										g28326 14	41	183	8.0e-08		(AL021711) hypothetical protein [Arabidopsis]

171025	ATU032 965	ATL8S3 0027:3 67..1	nap									g27393 87	41	306	3.6e- 32	(AC002 505) hypothe- tical protein [Arabi- dopsis thaliana]
171026	ATU032 966	ATL8S3 0157:4 03..1	nap									g48036 81	41	141	4.4e- 12	(AL049 819) putative AraC- family transcriptional regulator [Streptomyces coelicolor]
171027	ATU032 967	ATL8C1 5570:5 91..60	nap									g54191 3	41	602	2.5e- 62	oleyl- [Brassic napus]
171028	ATU032 968	ATL8C4 051:13 63..22 4	nap									g44173 09	41	503	6.9e- 52	(AC006 446) putative polyprotein with a

171029	ATU032 969	ATL8C3 9078:8 12..20 5	nap										g43712 80	41	280	3.0e- 29	(AC006 260) hypoth etical protei n [Arabi dopsis thalia na]	revers e transc riptas e domain [Arabi dopsis thalia na]
171030	ATU032 970	ATL8C2 1826:3 410..2 59	nap										g24433 20	41	845	1.4e- 87	(D8559 7) polypr oteins [Oryza austri aliensi s]	
171031	ATU032 971	ATL8S3 1032:7 39..31 9	nap										g41159 35	41	252	7.1e- 24	(AF118 223) contai ns simila rity to Helico bacter pylori peptid e	

171032	ATU032 972	ATL8S3 1040:5 20..1	nap							1.00	g40918 77	40	303	2.2e- 20	(AF061 331) alpha galact osidas e precu sor [Sacch aropol yspora erythr aea]	methio nine sulfox ide reduct ase (msrA) (GB:AE 000542) [Arabi dopsis thalia na]
171033	ATU032 973	ATL8S1 3720:1 ..463	nap								g80481 1	41	230	3.6e- 14	(M1310 0) unknow n protei n [Rattu s norveg icus]	
171034	ATU032 974	ATL8C3 7035:1 ..1612	nap								g35488 04	41	755		(AC005 313) unknow	

171035	ATU032 975	ATL8S2 7868:6 46..10 6	nap										g11684 93	41	468	1.4e- 32	ARGINA SE [Arabi dopsis thalia na]
171036	ATU032 976	ATL8S2 3010:3 86..1	nap										g11727 60	41	273	1.4e- 24	PUTATI VE PHOSPH ORIBOS YLAMIN OIMIDA ZOLE- SUCCIN OCARBO XAMIDE SYNTHA SE (SAICA R SYNTHE TASE) [Haemo philus influe nzae Rd]
171037	ATU032 977	ATL8C1 3140:1 06..69 9	nap										g38058 47	41	191	9.3e- 14	(AL031 986) putati ve protei n

171038	ATU032 978	ATL8C4 9195:1 308..3 43	nap							g12136 29	41	310	5.0e- 24	(X9599 1) pectin esterase [Prunus persical]	[Arabis dopsis thaliana]
171039	ATU032 979	ATL8C1 1282:6 12..1	nap							g36500 34	41	118	1.8e- 07	(AC005 396) putative flavonol sulfotransferase [Arabis dopsis thaliana]	
171040	ATU032 980	ATL8C2 7039:1 ..553	nap							g38941 87	41	717	1.8e- 61	(AC005 662) hypothetical protein [Arabis dopsis thaliana]	
171041	ATU032 981	ATL8S4 142:72 8..259	nap							g11683 80	41	209	6.3e- 20	AGAS PROTEIN [Escherichia col]	

171044	ATU032 984	ATL8C8 071:1. .376	nap									g38941 62	41	532	6.9e- 44	(AC005 312) hypoth etical protei n [Arabi dopsis thalia na]
171045	ATU032 985	ATL8C4 5670:1 273..1	nap									g47551 96	41	119	1.8e- 12	(AC007 018) simila r to the GDSL family of lipoly tic enzyme s [Arabi dopsis thalia na]
171046	ATU032 986	ATL8C3 7988:6 14..1	nap									g31641 32	41	612	2.7e- 49	(D7860 1) cytoch rome P450 monoox ygenas e

171047	ATU032 987	ATL8C4 947:66 6..97	nap					ATL8C4 947:50 1..97	0.99		g22451 24	40	483	3.9e- 46	(Z9734 3) protei n kinase [Arabi dopsis thalia na]
171048	ATU032 988	ATL8C2 2401:7 72..20 2	nap					ATL8C2 2401:4 59..20 2	0.99		g40068 30	40	241	3.2e- 21	(AC005 970) hypoth etical protei n [Arabi dopsis thalia na]
171049	ATU032 989	ATL8S2 7967:1 ..389	nap					ATL8S2 7967:7 3..352	0.98		g31231 50	40	244	4.5e- 21	HYPOTH ETICAL 37.4 KD PROTEI N IN SPOIIS A-HTRA INTERG ENIC REGION [Bacil lus subtil is]
171050	ATU032 990	ATL8S1 215:1.	nap					ATL8S1 215:14	0.98		g38057 58	40	1051	1.8e- 107	(AC005 693)

171051	ATU032 991	ATL8S1 2773:4 69..1	nap				8..670	0.98	g63208 5	40	110	1.6e- 08	putative gag- protease polypro- tein [Arabi- dopsis thaliana]
171052	ATU032 992	ATL8C4 454:86 7..1	nap				ATL8C4 454:86 7..231	0.97	g22449 56	40	255	6.3e- 27	(Z9734 0) strong similarity to pectin esterase [Arabi- dopsis thaliana]
171053	ATU032 993	ATL8C4 8895:1 396..1	nap				ATL8C4 8895:1 379..3 01	0.97	g38106 76	40	957	8.6e- 90	(AJ223 357) SKOR [Arabi- dopsis]

171054	ATU032 994	ATL8S2 3980:5 20..1	nap				ATL8S2 3980:4 44..82	0.97	g12744 8	40	400	1.2e- 29	thalia na] MODIFI CATION METHYL ASE ECORII (CYTOS INE- SPECIF IC METHYL TRANSF ERASE ECORII) (M.ECO RII) [Esche richia coli]
171055	ATU032 995	ATL8C2 6442:1 ..1545	nap				ATL8C2 6442:4 8..154 5	0.96	g40068 78	40	771	1.1e- 72	(Z9970 7) MAP3K- like protei n kinase [Arabi dopsis thalia na]
171056	ATU032 996	ATL8C1 7145:6 98..1	nap				ATL8C1 7145:3 33..12 7	0.96	g24967 30	40	300	4.8e- 32	HYPOTH ETICAL PROTEI N Y4OU PRECUR SOR [Rhizo bium]

171061	ATU033 001	ATL8C4 9980:1 ..1246	nap					ATL8C4 9980:1 94..85 0	0.94	948742 85	40	731	3.5e- 81	ve glucos yltran sferas e [Arabi dopsis thalia na]
171062	ATU033 002	ATL8C3 0105:1 541..1	nap					ATL8C3 0105:1 541..2 11	0.94	934210 72	40	341	8.1e- 26	(AC007 212) putati ve phosph atidyl inosit ol/pho phatid ylchol ine transf er protei n [Arabi dopsis thalia na]
171063	ATU033	ATL8C1	nap					ATL8C1	0.94	937859	40	1219	4.1e-	(AF043 519) 20S protea some subuni t PAA2 [Arabi dopsis thalia na]
														(AC005)

003	7387:5 12..37 81					7387:1 507..3 583	84				126	560) putati ve revers e transc riptas e [Arabi dopsis thalia na]
171064	ATU033 004	ATL8C2 7871:6 15..1	nap			ATL8C2 7871:1 45..12	0.93	g24594 46	40	221		(AC002 332) putati ve cinnam oyl- CoA reduct ase [Arabi dopsis thalia na]
171065	ATU033 005	ATL8C3 2401:1 ..1213	nap			ATL8C3 2401:1 35..97 0	0.93	g48952 19	40	107	0.0009 1	(AC007 660) hypoth etical protei n [Arabi dopsis thalia na]
171066	ATU033 006	ATL8C2 1862:1 ..1262	nap			ATL8C2 1862:8 3..105 4	0.92	g30565 80	40	1382	2.4e- 144	(AC004 255) T1F9.1 [Arabi dopsis

171067	ATU033 007	ATL8C1 2546:3 015..3 627	nap					ATL8C1 2546:3 015..3 426	0.92	940564 16	40	190	4.1e- 05	(AC005 322) Strong simila rity to Dsor1 protei n kinase gb D13 782 from Drosop hila melano gaster [Arabi dopsis thalia na]
171068	ATU033 008	ATL8S1 790:1. .523	nap					ATL8S1 790:53 ..478	0.91	945673 22	40	613	3.8e- 55	(AC005 956) hypoth etical protei n [Arabi dopsis thalia na]
171069	ATU033 009	ATL8C4 8573:1 276..1	nap					ATL8C4 8573:1 276..3 1	0.91	936872 29	40	481	4.6e- 47	(AC005 169) hypoth etical protei n

171070	ATU033 010	ATL8C1 8898:6 09..34 68	nap					ATL8C1 8898:6 09..32 60	0.91	g41043 21	40	423	1.6e- 35	[Arabi dopsis thalia na]
171071	ATU033 011	ATL8C1 8501:3 70..19 34	nap					ATL8C1 8501:3 70..18 43	0.90	g49268 20	40	278	2.0e- 23	(AF034 582) vesicl e associ ated prote in [Rattu s norveg icus]
171072	ATU033 012	ATL8S2 5743:1 ..570	nap					ATL8S2 5743:4 78..61	0.90	g54981 4	40	268	1.1e- 16	(AC004 135) T17H7. 5 [Arabi dopsis thalia na]
171073	ATU033 013	ATL8C3 0225:1	nap					ATL8C3 0225:1	0.90	g44540 35	40	723	2.6e- 67	HYPOTH ETICAL TRANSC RIPTIO NAL REGULA TOR IN RDXA 3'REGI ON [Rhodo bacter sphaer oides]
														(AL035 394)

171074	ATU033 014	ATL8C4 8004:1 ..1053	nap				018..5 72	018..5 76		0.90	g32818 53	40	567	1.7e- 47	(AL031 004) putati ve protei n [Arabi dopsis thalia na]
171075	ATU033 015	ATL8C3 2364:1 ..1088	nap				ATL8C3 2364:1 53..10 88	ATL8C4 8004:2 24..10 53		0.90	g49143 73	40	543	4.0e- 53	(AC007 584) putati ve protei n kinase [Arabi dopsis thalia na]
171076	ATU033 016	ATL8C4 6199:1 ..621	nap				ATL8C4 6199:1 38..54 6	ATL8C4 6199:1 38..54 6		0.89	g45875 27	40	529	8.5e- 47	(AC007 060) Strong simila rity to F19I3. 2 []

171077	ATU033 017	ATL8S1 067:1. :537	nap			ATL8S1 067:19 2..254	0.88	g28299 25	40	173	1.2e- 15	(AC002 291) Simila r to dnaj- like protei n, gp Y11 969 22 30757 [Arabi dopsis thalia na]
171078	ATU033 018	ATL8S2 503:53 9..1	nap			ATL8S2 503:53 3..36	0.88	g48357 63	40	506	7.1e- 49	(AC007 202) T8K14. 13 [Arabi dopsis thalia na]
171079	ATU033 019	ATL8S1 907:30 9..1	nap			ATL8S1 907:17 3..75	0.88	g48368 87	40	293	6.2e- 16	(AC007 260) lcl pr t_seq No defini tion line found [Arabi dopsis thalia na]
171080	ATU033 020	ATL8C4 1863:1 54..19 91	nap			ATL8C4 1863:1 54..19 91	0.88	g31079 05	40	119	3.5e- 09	(D8510 1) leaf protei

171081	ATU033 021	ATL8C8 590:82 4..1	nap							ATL8C8 590:75 7..111	0.87		g55307 3	40	961	1.1e- 87	n [Ipomo ea nill] (M9448 1) revers e transc riptas e [Zea mays]
171082	ATU033 022	ATL8C4 4895:9 87..74	nap							ATL8C4 4895:9 69..74	0.87		g12371 83	40	708	1.2e- 60	(D4377 3) 4- coumar ate:co enzyme A ligase [Nicot iana tabacu m]
171083	ATU033 023	ATL8C1 5649:1 ..473	nap							ATL8C1 5649:1 66..33 7	0.86		g36000 61	40	451	5.2e- 37	(AF080 120) contai ns simila rity to DNA bindin g protei ns [Arabi dopsis thalia na]
171084	ATU033	ATL8C4	nap							ATL8C4	0.86		g25066	40	398	7.9e-	HYPOTH

	024	5190:1 ..532					5190:1 01..49 6	28	36	ETICAL 49.6 KD PROTEI N IN LOLA- SERS INTERG ENIC REGION [Esche richia coli]
171085	ATU033 025	ATL8C3 2866:2 0..106 1	nap				ATL8C3 2866:2 80..74 2	0.86 g24355 17	40 336	1.3e- 14 (AF024 504) contai ns simila rity to peptid ase family Al [Arabi dopsis thalia na]
171086	ATU033 026	ATL8C1 1921:7 16..1	nap				ATL8C1 1921:7 16..66	0.85 g45593 33	40 567	3.9e- 50 (AC007 087) unknow n protei n [Arabi dopsis thalia na]
171087	ATU033 027	ATL8C4 288:1.	nap				ATL8C4 288:82	0.85 g29824 52	40 753	6.9e- 62 (AL022 223)

171088	ATU033 028	ATL8C1 7103:1 ..4373	nap						..1141	0.85	g44553 34	40	2183	3.8e- 155	(AL035 525) myosin -like protein [Arabi dopsis thalia na]
171089	ATU033 029	ATL8C3 3499:1 069..1	nap						ATL8C3 3499:1 069..1 54	0.85	g44163 01	40	1355	1.0e- 119	(AF105 716) gag protein [Zea mays]
171090	ATU033 030	ATL8C2 436:15 28..1	nap						ATL8C2 436:12 63..11	0.84	g48504 04	40	1606	7.6e- 165	(AC007 357) Simila r to gb1AF0 38007 FIC1 gene from Homo sapien

171091	ATU033 031	ATL8C2 932:1. .1006	nap							ATL8C2 932:11 8..100 6	0.84	928946 07	40	200	4.1e- 22	(AL021 889) NAM (no apical merist em) - like protei n [Arabi dopsis thalia na]
171092	ATU033 032	ATL8C2 7184:1	nap							ATL8C2 7184:1	0.84	945593 47	40	858	5.6e- 79	(AC006 585) [Arabi dopsis thalia na]

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171093	ATU033 033	155..1 64	nap					155..1 64	0.84	g44159 19	40	531	4.0e- 27	(AC006 282) hypoth etical protei n [Arabi dopsis thalia nal]	putati ve extens in [Arabi dopsis thalia nal]
171094	ATU033 034	ATL8S1 0218:1 10..52 4	nap					ATL8S1 0218:1 22..50 3	0.83	g14145 6	40	200	1.0e- 16	HYPOTH ETICAL 35.9 KD PROTEI N IN TCBD- TCBE INTERG ENIC REGION PRECUR SOR [Pseud omonas sp.]	HYPOTH ETICAL 35.9 KD PROTEI N IN TCBD- TCBE INTERG ENIC REGION PRECUR SOR [Pseud omonas sp.]
171095	ATU033 035	ATL8S3 945:71 2..1	nap					ATL8S3 945:44 6..23	0.83	g19445 92	40	142	2.2e- 12	(Z9412 1) hypoth etical protei n	(Z9412 1) hypoth etical protei n

171096	ATU033 036	ATL8C3 9123:8 16..1	nap				ATL8C3 9123:7 72..7	0.83	g30634 47	40	400	6.6e- 42	(AC003 981) F22013 .9 [Arabi dopsis thalia na]	Rv3896 c [Mycob acteri um tuberc ulosis]
171097	ATU033 037	ATL8C4 8982:1 751..1	nap				ATL8C4 8982:1 398..4 9	0.82	g38739 26	40	84	1.3e- 05	(Z7552 5) simila r to mRNA cappin g enzyme [Caeno rhabdi tis elegan s]	
171098	ATU033 038	ATL8C2 8320:1 ..838	nap				ATL8C2 8320:9 6..829	0.82	g42637 77	40	567	4.8e- 60	(AC006 068) putati ve serine carbox ypepti dase II [Arabi dopsis	

171099	ATU033 039	ATL8C3 1902:5 54..84 9	nap				ATL8C3 1902:5 54..76 8	0.82	g21911 60	40	69	0.018	thalia nal (AF007 270) Simila r to pectin estera se [Arabi dopsis thalia nal]
171100	ATU033 040	ATL8C2 178:1. .1100	nap				ATL8C2 178:42 8..896	0.82	g37765 81	40	664	1.0e- 53	(AC005 388) Simila r to Beta integr al membra ne protei n homolo g gb U43 629 from A. thalia na. [Arabi dopsis thalia nal]
171101	ATU033 041	ATL8C3 562:1. .935	nap				ATL8C3 562:7. .892	0.81	g28276 51	40	465	1.2e- 45	(AL021 637) putati ve

171102	ATU033 042	ATL8C2 9599:1 ..2741	nap							ATL8C2 9599:1 437..2 615	0.81	g33353 39, g45444 55	40, 33	198, 151	2.5e- 20, 2.5e- 11	prote n [Arabi dopsis thalia na]
171103	ATU033 043	ATL8C3 5094:6 38..20	nap							ATL8C3 5094:6 07..21	0.81	g49144 35	40	302	3.7e- 29	(AC004 512) Contai ns simila rity to MADS- box protei n AGL3 gb U81 369 from A. thalia na. [Arabi dopsis thalia na]; (AC006 592) hypo thetical protei n [Arabi dopsis thalia na] (AL050 351) NAD(P)

171106	ATU033 046	ATL8C3 9234:1 ..1793	nap					ATL8C3 9234:1 34..17 69	0.81	g35229 43	40	1928	4.0e- 196	ns from B. subtil is [Bacil lus subtil is]
171107	ATU033 047	ATL8C2 5636:1 ..1043	nap					ATL8C2 5636:4 5..101 4	0.81	g32818 63	40	820	1.0e- 85	(AL031 004) putati ve protei n [Arabi dopsis thalia na]
171108	ATU033 048	ATL8S2 4005:1 ..532	nap					ATL8S2 4005:4 73..23	0.81	g11870 4	40	434	6.6e- 37	CHROMO SOMAL REPLIC ATION INITIA TOR PROTEI N DNAA [Bacil lus subtil

171109	ATU033 049	ATL8C4 7211:1 475..1 242	nap				ATL8C4 7211:1 379..1 242	0.80	g43097 28	40	207	1.7e- 19	(AC006 439) putati ve ADP- ribosy lation factor [Arabi dopsis thalia na]
171110	ATU033 050	ATL8C1 3240:1 539..1	nap				ATL8C1 3240:1 209..3 15	0.80	g41602 92	40	806	4.3e- 52	(Y1820 9) alpha- N- acetyl glucos aminid ase [Nicot iana tabacu m]
171111	ATU033 051	ATL8S2 0719:5 29..1	nap				ATL8S2 0719:2 10..78	0.80	g46783 55	40	85	4.5e- 05	(AL049 659) protei n-L- isoasp artate (D- aspart ate) O- methyl transf erase [Arabi dopsis

171112	ATU033 052	ATL8C4 6182:1 ..1417	nap				ATL8C4 6182:7 ..1331	0.80		g45443 86	40	1117	3.3e- 120	(AC007 047) putati ve cell divisi on contro l protei n [Arabi dopsis thalia na]
171113	ATU033 053	ATL8C4 9853:3 78..1	nap				ATL8C4 9853:3 56..39	0.80		g22136 31	40	454	7.2e- 43	(AC000 103) F21J9. 23 [Arabi dopsis thalia na]
171114	ATU033 054	ATL8C3 7152:1 ..949	nap				ATL8C3 7152:1 39..94 9	0.79		g32362 53	40	569		(AC004 684) recept or- like protei n kinase [Arabi dopsis thalia na]
171115	ATU033 055	ATL8C2 6501:1 ..772	nap				ATL8C2 6501:9 9..532	0.79		g30804 13	40	645	3.9e- 70	(AL022 604) putati

171116	ATU033 056	ATL8C2 6176:9 95..1	nap				ATL8C2 6176:8 44..38 0	0.79	g43888 25	40	1448	3.6e- 103	ve protei n [Arabi dopsis thalia na]
171117	ATU033 057	ATL8C2 4370:1 212..1	nap				ATL8C2 4370:1 212..1 35	0.79	g45859 37	40	653	1.0e- 68	(AC007 211) putati ve repl ic ation protei n A1 [Arabi dopsis thalia na]
171118	ATU033	ATL8S3	nap				ATL8S3	0.79	g39153	40	166	3.0e-	HYPOTH

	058	0919:3 60..1					0919:3 28..10 0		98				13	ETICAL PROTEI N IN BBUR 5'REGI ON PRECUR SOR [Borde tella bronch i'septi cal]
171119	ATU033 059	ATL8C5 742:51 3..141 0	nap				ATL8C5 742:51 3..103 3	0.79	g40068 24	40	630			(AC005 970) hypoth etical protei n [Arabi dopsis thalia na]
171120	ATU033 060	ATL8C1 0763:1 ..1509	nap				ATL8C1 0763:1 30..14 53	0.78	g32427 87	40	1607	9.8e- 155		(AF055 356) respir atory burst oxidas e protei n E [Arabi dopsis thalia na]
171121	ATU033 061	ATL8C4 8768:1 ..607	nap				ATL8C4 8768:1 78..60 7	0.78	g32362 40	40	931	5.0e- 92		(AC004 684) unknow n

171122	ATU033 062	ATL8C1 0052:1 844..1	nap					ATL8C1 0052:1 844..5 0	0.78	g22450 71	40	219		protein [Arabi dopsis thalia nal]
														(Z9734 2) hypoth etical protei n
171123	ATU033 063	ATL8S1 1570:1 ..511	nap					ATL8S1 1570:1 28..49 0	0.77	g39137 36	40	454	8.1e- 39	protein [Arabi dopsis thalia nal]
														SERINE HYDROX YMETHY LTRANS FERASE (SERIN E METHYL ASE) (SHMT) [Borre lia burgdo rferij]
171124	ATU033 064	ATL8C3 9939:6 186..1 73	nap					ATL8C3 9939:6 177..1 73	0.77	g36953 99	40	1678	4.7e- 167	(AF096 372) contai ns simila rity to Arabid opsis thalia

171125	ATU033 065	ATL8C4 8009:1 ..1546	nap						ATL8C4 8009:6 4..153 9	0.76	g99721	40	2072	9.6e- 210	na retrot ranspo son Athila (GB:X8 1801) [Arabi dopsis thalia na]
171126	ATU033 066	ATL8C7 35:1.. 908	nap						ATL8C7 35:136 ..468	0.76	g21295 59	40	901	3.7e- 84	cellul ase homolo g OR16pe p - Arabid opsis thalia na

171127	ATU033 067	ATL8S1 4047:1 ..516	nap					ATL8S1 4047:7 8..399	0.76	g25647 09	40	507	2.4e- 41	[Arabi dopsis thalia na] (AF026 490) adenyl osucci nate synthe tase [Edwar dsiell a ictalu ri]
171128	ATU033 068	ATL8S2 5383:5 79..1	nap					ATL8S2 5383:3 86..3	0.75	g16216 53	40	237	1.1e- 22	(U7316 0) fatty acid desatu rase [Droso phila melano gaster]
171129	ATU033 069	ATL8C7 554:19 74..1 _e	nap					ATL8C7 554:49 7..14	0.75	g35137 45	40	1602	3.0e- 164	(AF080 118) contai ns simila rity to , revers e trancr iptase (Pfam: rvt.hm

171130	ATU033 070	ATL8C6 428:1. .1394	nap					ATL8C6 428:10 5..137 3	0.75	g38601 63	40	739	1.3e- 85	(AF098 962) diseas e resist ance protei n RPP1- WSA [Arabi dopsis thalia na]
171131	ATU033 071	ATL8C3 876:55 3..156 1	nap					ATL8C3 876:62 1..143 6	0.74	g46783 42	40	50	0.0014	(AL049 659) lipase -like protei n [Arabi dopsis thalia na]
171132	ATU033 072	ATL8C1 5263:4 07..74 4	nap					ATL8C1 5263:4 25..59 3	0.74	g14189 90	40	62	0.0009 7	(Z7552 4) unknow n [Lycop ersico n escule ntum]

171133	ATU033 073	ATL8C1 3147:1 383..1	nap				ATL8C1 3147:1 305..2 5	0.74	g43357 17	40	1108	2.0e- 108	(AC006 248) putati ve revers e transc riptas e [Arabi dopsis thalia na]
171134	ATU033 074	ATL8C2 5:1046 ..1	nap				ATL8C2 5:818. .45	0.74	g42630 63	40	720	1.6e- 61	(AC005 142) hypoth etical protei n [Arabi dopsis thalia na]
171135	ATU033 075	ATL8C5 0250:7 261..5 732	nap				ATL8C5 0250:7 261..5 911	0.74	g45876 83	40	1050	1.1e- 41	(AC007 197) hypoth etical protei n [Arabi dopsis thalia na]
171136	ATU033 076	ATL8C1 2197:2 447..1 764	nap				ATL8C1 2197:2 327..2 142	0.73	g44173 05	40	310	6.5e- 18	(AC006 446) hypoth etical protei n [Arabi

171137	ATU033 077	ATL8C1 1188:5 43..1	nap					ATL8C1 1188:4 49..84	0.73	g28282 52	40	350	2.1e- 33	(AJ003 137) CYP1 [Lycop ersico n escule ntum]
171138	ATU033 078	ATL8C4 3009:9 0..613	nap					ATL8C4 3009:9 0..272	0.73	g28326 96	40	199	4.7e- 16	(AL021 713) putati ve protei n [Arabi dopsis thalia na]
171139	ATU033 079	ATL8C1 7041:1 670..1	nap					ATL8C1 7041:1 670..2 30	0.73	g42638 25	40	2308	3.3e- 225	(AC006 067) hypoth etical protei n [Arabi dopsis thalia na]
171140	ATU033 080	ATL8C3 305:1. .1133	nap					ATL8C3 305:74 ..1133	0.72	g45672 95	40	660	2.0e- 62	(AC006 918) putati ve pol ypr otei n [Arabi dopsis thalia na]

171145	ATU033 085	ATL8S2 1044:1 ..538	nap					ATL8S2 1044:4 76..93	0.70	g24999 28	40	163	2.3e- 09	HYPOTH ETICAL ZINC PROTEA SE- LIKE PROTEI N Y4WB [Rhizo bium sp. NGR234]	ality to Ipomoe a nil leaf protei n.(GB: D85101) [Arabi dopsis thalia na]
171146	ATU033 086	ATL8C1 9134:3 879..3 147	nap					ATL8C1 9134:3 434..3 147	0.70	g44552 28	40	447	1.1e- 33	(AL035 440) putati ve protei n [Arabi dopsis thalia na]	
171147	ATU033 087	ATL8C4 6468:7 3..301 3	nap					ATL8C4 6468:7 3..290 3	0.70	g24659 23	40	159	1.6e- 11	(AF024 648) recept or-	

171151	ATU033 091	ATL8C9 753:20 49..1	nap				ATL8C9 753:19 37..15 9	0.69	g28530 79	40	981	5.4e- 102	(AL021 768) resist ance protei n RPP5- like [Arabi dopsis thalia na]
171152	ATU033 092	ATL8C1 229:26 96..29 70	nap				ATL8C1 229:27 25..29 51	0.69	g33428 21	40	94	1.2e- 05	(AF076 954) eukary otic transl ation initia tion factor small subuni t [Zea mays]
171153	ATU033 093	ATL8C5 079:1. .774	nap				ATL8C5 079:28 3..764	0.69	g33866 11	40	261	2.6e- 22	(AC004 665) unknow n protei n [Arabi dopsis thalia na]
171154	ATU033 094	ATL8C3 7008:9 16..1	nap				ATL8C3 7008:7 32..14 9	0.68	g47536 46	40	813		(AL049 751) putati ve

171155	ATU033 095	ATL8C1 879:1. .285	nap						ATL8C1 879:47 ..285	0.68	g46783 55	40	259	1.9e- 24	protein (possibly fragment) [Arabidopsis thaliana nap] (AL049 659) protein- L-isoasp artate (D- aspart ate) O- methyl transf erase [Arabid opsis thaliana nap]
171156	ATU033 096	ATL8S2 5341:5 92..1	nap						ATL8S2 5341:4 75..26	0.68	g28326 36	40	201	4.5e- 22	(AL021 711) hypoth etical protein [Arabid opsis thaliana nap]
171157	ATU033 097	ATL8C7 28:305 ..1341	nap						ATL8C7 28:305 ..1318	0.68	g45389 44	40	70	0.0002 5	(AL049 483) putati

171158	ATU033 098	ATL8C4 2495:1 981..1	nap					ATL8C4 2495:1 981..1 73	0.68		g43253 24	40	384	3.9e- 35	ve transc ription factor [Arabi dopsis thalia na]
171159	ATU033 099	ATL8C1 8045:1 826..1 190	nap					ATL8C1 8045:1 770..1 190	0.67		g22528 62	40	714	2.7e- 73	(AF013 294) Simila r to recept or kinase [Arabi dopsis thalia na]
171160	ATU033 100	ATL8C3 8332:1 807..1	nap					ATL8C3 8332:1 210..1 3	0.66		g23427 38	40	263	3.5e- 14	(AC002 341) hypoth etical protei n [Arabi dopsis thalia na]

171161	ATU033 101	ATL8S2 5642:5 40..1	nap				ATL8S2 5642:4 83..63	0.66	g48862 82	40	283	1.2e- 24	nal (AL050 300) putati ve protei n [Arabi dopsis thalia nal]
171162	ATU033 102	ATL8C4 8856:1 ..1184	nap				ATL8C4 8856:2 89..97 5	0.66	g28326 61	40	202	3.9e- 09	(AL021 710) pherop horin - like protei n [Arabi dopsis thalia nal]
171163	ATU033 103	ATL8C4 5759:1 ..2279	nap				ATL8C4 5759:4 15..19 77	0.66	g33193 69, g42636 49	40, 30	1235, 392	2.1e- 105, 9.6e- 37	(AF077 409) contai ns simila rity to human CD44R1 gene produc t (GB:X5 6794) [Arabi dopsis thalia nal];

171164	ATU033 104	ATL8S3 495:50 1..46	nap					ATL8S3 495:43 5..46	0.65	g11761 22	40	223	1.7e- 16	(AC006 136) hypoth etical protei n [Arabi dopsis thalia na]
171165	ATU033 105	ATL8S1 4879:1 ..581	nap					ATL8S1 4879:4 8..496	0.65	g26356 59	40	234	6.3e- 21	(Z9912 0) simila r to NADH dehydr ogenas e (ubiqu inone) [Bacil lus subtil is]
171166	ATU033	ATL8S9	nap					ATL8S9	0.65	g16536	40	256	6.1e-	(D9091)

106	387:54 3..1							387:54 3..82		57				17	5) aminop eptida se P [Synec hocyst is sp.]
171167	ATU033 107	ATL8S1 3052:1 ..551	nap					ATL8S1 3052:4 3..522	0.64	g43772 92	40	420	2.3e- 32	(AE001 677) Phosph oglucos mutase [Chlam ydia pneumo niae]	
171168	ATU033 108	ATL8S1 048:58 0..193	nap					ATL8S1 048:38 4..306	0.64	g45876 06	40	349	2.0e- 33	(AC006 951) putati ve antise nse basic fibrob last growth factor [Arabi dopsis thalia na]	
171169	ATU033 109	ATL8C4 6103:1 199..1	nap					ATL8C4 6103:1 199..3 6	0.64	g45570 78	40	1710	8.8e- 177	(AC007 045) putati ve Tall-1 pol polypr otein,	

the 2nd 3rd 4th 5th 6th 7th 8th 9th 10th 11th 12th 13th 14th 15th 16th 17th 18th 19th 20th 21st 22nd 23rd 24th 25th 26th 27th 28th 29th 30th 31st 32nd 33rd 34th 35th 36th 37th 38th 39th 40th 41st 42nd 43rd 44th 45th 46th 47th 48th 49th 50th 51st 52nd 53rd 54th 55th 56th 57th 58th 59th 60th 61st 62nd 63rd 64th 65th 66th 67th 68th 69th 70th 71st 72nd 73rd 74th 75th 76th 77th 78th 79th 80th 81st 82nd 83rd 84th 85th 86th 87th 88th 89th 90th 91st 92nd 93rd 94th 95th 96th 97th 98th 99th 100th

171170	ATU033 110	ATL8C4 1959:1 ..650	nap					ATL8C4 1959:6 4..650	0.64	g46461 97	40	430	3.1e- 41	(AC007 230) T23K8. 5 [Arabi dopsis thalia na]
171171	ATU033 111	ATL8C2 9803:3 55..1	nap					ATL8C2 9803:2 95..10 0	0.64	g21296 64	40	81	0.0063	pathog enesis - relate d protei n 1 precu sor - Arabid opsis thalia na [Arabi dopsis thalia na]
171172	ATU033 112	ATL8C3 3974:5 34..10 70	nap					ATL8C3 3974:9 68..64 3	0.64	g47551 89	40	586	(AC007 018) putati ve cytoch rome P450 [Arabi	

171173	ATU033 113	ATL8C1 8789:1 ..870	nap				ATL8C1 8789:2 42..65 1	0.63	g33353 57	40	824	1.4e- 82	dopsis thalia na] (AC003 028) putati ve diphen ol oxidas e [Arabi dopsis thalia na]
171174	ATU033 114	ATL8C3 6013:8 0..299 2	nap				ATL8C3 6013:1 04..27 80	0.63	g31525 87	40	457	7.3e- 40	(AC002 986) Simila r to CREB- bindin g protei n homolo g gb U88 570 from D. melano gaster and contai ns simila rity to callus _

171175	ATU033 115	ATL8C2 6096:1 ..1770	nap						ATL8C2 6096:2 33..17 11	0.62	g39246 09	40	2543	2.8e- 258	associated protein gb U01 961 from Nicoti ana tabacu m. EST gb W43 427 comes from this gene. [Arabi dopsis thalia na]
171176	ATU033 116	ATL8C3 9581:1 212..1	nap						ATL8C3 9581:1 176..4 9	0.62	g36953 99	40	1424	1.5e- 142	(AF069 442) putati ve polypr otein of LTR transp oson [Arabi dopsis thalia na]
															(AF096 372) contai ns simila

171177	ATU033 117	ATL8C2 1199:1 491..1	nap				ATL8C2 1199:1 424..4 76	0.61	g44553 50	40	258	2.3e- 27	rity to Arabid opsis thalia na retrot ranspo son Athila (GB:X8 1801) [Arabi dopsis thalia na]
171178	ATU033 118	ATL8C2 6238:4 14..1	nap				ATL8C2 6238:3 77..28	0.61	g23427 28	40	363	4.6e- 38	(AC002 341) Cystei ne protei nase isolog [Arabi dopsis thalia na]
171179	ATU033 119	ATL8S1 0048:6 55..1	nap				ATL8S1 0048:6 09..10	0.61	g40023 3	40	394	1.1e- 15	METHYL - ACCEPT

171180	ATU033 120	ATL8C2 5707:1 404..2 30	nap						ATL8C2 5707:1 275..2 30	0.60	g17232 32	40	335	1.5e- 31	ING CHEMOT AXIS PROTEI N I (MCP- I) (SERIN E CHEMOR ECEPTO R PROTEI N) [Esche richia coli]
171181	ATU033 121	ATL8S2 2469:1 49..55 6	nap						ATL8S2 2469:1 73..52 6	0.60	g11743 92	40	183	4.7e- 09	POSSIB LE PROTEA SE SOHB [Haemo philus influe

171182	ATU033 122	ATL8C1 0647:8 19..17 85	nap				ATL8C1 0647:8 19..12 39	0.60	g47340 07	40	394		nzae Rd]
171183	ATU033 123	ATL8C4 7732:1 030..1 387	nap				ATL8C4 7732:1 056..1 334	0.60	g45862 45	40	169	2.9e- 13	(AC007 178) hypoth etical protein [Arabi dopsis thalia na]
171184	ATU033 124	ATL8C4 8986:6 30..39 2	nap				ATL8C4 8986:5 53..47 6	0.59	g45147 16	40	111	1.7e- 07	(AB017 533) EPC [Nicot iana tabacu m]
171185	ATU033 125	ATL8C4 1036:1 ..1396	nap				ATL8C4 1036:1 65..11 17	0.59	g43357 20	40	1673	1.6e- 175	(AC006 248) putati ve revers e transc riptas e Tal- 1 [Arabi

171186	ATU033 126	ATL8C2 0717:2 410..1	nap				ATL8C2 0717:2 018..9 46	0.58	g45443 75	40	2529	5.2e- 242	dopsis thalia na] (AC006 920) putati ve revers e transc riptas e [Arabi dopsis thalia na]
171187	ATU033 127	ATL8C1 4233:1 ..1270	nap				ATL8C1 4233:1 221..1 270	0.58	g31842 87	40	180	1.1e- 15	(AC004 136) revers e- transc riptas e-like protei n [Arabi dopsis thalia na]
171188	ATU033 128	ATL8C3 2041:1 ..964	nap				ATL8C3 2041:7 77..91 9	0.57	g42204 91	40	283	9.1e- 31	(AC006 069) hypoth etical protei n [Arabi dopsis thalia na]
171189	ATU033	ATL8S1	nap				ATL8S1	0.57	g43781	40	408	2.0e-	(AF102

129	544:1. .558							544:19 ..254		72				36	543) argino succin ate lyase [Zymom onas mobili s]
171190	ATU033 130	ATL8C1 1285:1 747..1 055	nap					ATL8C1 1285:1 602..1 055	0.57	g24438 86	40	144	2.4e- 11	(AC002 294) Unknown n protein [Arabi dopsis thalia na]	
171191	ATU033 131	ATL8S2 4472:5 05..1	nap					ATL8S2 4472:5 05..9	0.56	g45862 42	40	274	3.3e- 26	(AL049 640) putati ve protei n (fragm ent) [Arabi dopsis thalia na]	
171192	ATU033 132	ATL8C2 305:59 8..969	nap					ATL8C2 305:59 8..872	0.56	g28326 71	40	414	4.4e- 43	(AL021 712) hypoth etical protei n [Arabi dopsis thalia	

171193	ATU033 133	ATL8S1 9118:1 54..30 2	nap				ATL8S1 9118:1 54..28 1	0.55	g47320 57	40	179	8.6e- 15	na] (AF121 341) putati ve respon se regula tor CelR1 [Rhizo bium legumi nosaru m]
171194	ATU033 134	ATL8C4 0862:1 ..721	nap				ATL8C4 0862:4 01..26 9	0.54	g14028 83	40	160	7.4e- 16	(X9813 0) unknown [Arabi dopsis thalia na]
171195	ATU033 135	ATL8C3 9994:6 47..1	nap				ATL8C3 9994:5 44..91	0.54	g42635 27	40	948	2.0e- 95	(AC004 044) hypoth etical protei n [Arabi dopsis thalia na]
171196	ATU033 136	ATL8C2 716:11 ..634	nap				ATL8C2 716:11 ..494	0.53	g28424 93	40	249	4.8e- 27	(AL021 749) predic ted protei n [Arabi

171197	ATU033 137	ATL8C3 9960:3 002..1	nap					ATL8C3 9960:3 002..7 3	0.53	g47739 08	40	604	2.3e- 70	dopsis thalia na] (AF147 259) No defini tion line found [Arabi dopsis thalia na]
171198	ATU033 138	ATL8C2 4592:1 111..1	nap					ATL8C2 4592:1 111..7 7	0.52	g33353 52	40	396	2.3e- 26	(AC004 512) Contai ns simila rity to serine /threo nine kinase homolo g PRO25 gb L04 999 from A. thalia na. EST gb Z17 531 comes from this

171199	ATU033 139	ATL8C4 9722:1 ..2808	nap				ATL8C4 9722:7 1..163 1	0.52	g43253 54	40	1918	1.1e- 182	gene. [Arabi dopsis thalia na] (AF128 395) contai ns simila rity to retrov irus- relate d polypr oteins and to CCHC zinc finger protei n (Pfam: PF0009 8, Score= 16.3, E=0.05 1, E= 1) [Arabi dopsis thalia na] (D8855 5) orf2 [Metha
171200	ATU033 140	ATL8S1 9182:1 ..276	nap				ATL8S1 9182:6 7..267	0.52	g16693 58	40	104	9.1e- 08	

171201	ATU033 141	ATL8S8 162:52 9..1	nap					ATL8S8 162:38 0..76	0.51	g31283 79	40	408	1.5e- 38	{AF010 496) gid protei n [Rhodo bacter capsul atus]
171202	ATU033 142	ATL8C4 7566:1 270..1	nap					ATL8C4 7566:1 234..2 10	0.50	g12796 40	40	363	4.4e- 39	(X9220 4) NAM [Petun ia x hybrid al]
171203	ATU033 143	ATL8C3 0479:9 2..804	nap					ATL8C3 0479:9 2..702	0.50	g45672 96	40	261	4.1e- 27	(AC006 918) putati ve Athila retroeo lement ORF1 protei n [Arabi dopsis thalia na]
171204	ATU033 144	ATL8C2 4565:8 02..1	nap					ATL8C2 4565:8 02..21	0.50	g49143 81	40	633	7.6e- 43	(AC007 584) unknow n protei

171205	ATU033 145	ATL8C3 491:62 5..78	nap					ATL8C3 491:38 6..78	0.50	g29470 59	40	360	2.2e- 30	n [Arabi dopsis thalia na] (AC002 521) simila r to myb transf orming protei n [Arabi dopsis thalia na]
171206	ATU033 146	ATL8C3 8379:5 38..1	nap					ATL8C3 8379:5 12..10 5	0.50	g45811 43	40	219	9.2e- 22	(AC006 919) hypoth etical protei n [Arabi dopsis thalia na]
171207	ATU033 147	ATL8S1 5314:4 03..1	nap					ATL8S1 5314:3 08..29	0.50	g31223 57	40	163	1.9e- 12	PUTATI VE LIPOAT E- PROTEI N LIGASE B (LIPOA TE BIOSYN THESIS

171208	ATU033 148	ATL8S2 9860:5 49..1	nap				ATL8S2 9860:4 90..14	0.49	g15429 60	40	237	1.8e- 22	PROTEI N B) [Arabi dopsis thalia na] (U2427 7) isopro pylben zene 2,3- dioxyg enase [Rhodo coccus erythr opolis]
171209	ATU033 149	ATL8S1 3411:3 79..1	nap				ATL8S1 3411:2 21..17 1	0.49	g45444 60	40	166	1.2e- 10	(AC006 592) putati ve revers e transc riptas e [Arabi dopsis thalia na] (U6840 8) in- frame stop codon; possib ly a post-
171210	ATU033 150	ATL8C2 1878:1 530..4 44	nap				ATL8C2 1878:1 530..4 44	0.49	g36458 98	40	1114	1.9e- 86	(U6840 8) in- frame stop codon; possib ly a post-

171211	ATU033 151	ATI8S1 4616:2 50..1	nap						ATI8S1 4616:2 03..39	0.49	g30969 38	40	160	1.9e- 11	(AL023 094) hypoth etical protei n [Arabi dopsis thalia na]	transp ositi on mutati on [Zea mays]
171212	ATU033 152	ATI8S1 761:1. .500	nap						ATI8S1 761:15 8..452	0.48	g28946 08	40	427	4.4e- 43	(AL021 889) putati ve protei n [Arabi dopsis thalia na]	
171213	ATU033 153	ATI8S2 5445:1 ..427	nap						ATI8S2 5445:5 8..427	0.48	g58478 5	40	296	2.7e- 26	CDP-6- DEOXY- DELTA- 3,4- GLUCOS EEN REDUCT ASE (E3) [Yersi nia pseudo tuberc	

171214	ATU033 154	ATL8C1 7869:1 ..428	nap				ATL8C1 7869:3 15..26 4	0.46	g48369 03	40	358		ulosis]
171215	ATU033 155	ATL8C2 2689:1 ..534	nap				ATL8C2 2689:3 37..48 6	0.46	g72910 2	40	173	1.2e- 14	(AC007 369) Simila r to phosph ate transp orter protei ns [Arabi dopsis thalia na]
171216	ATU033 156	ATL8C2 1955:1 259..1	nap				ATL8C2 1955:1 114..1 78	0.44	g19316 52	40	673	4.3e- 58	(U9597 3) phosph atidyl inosit ol-4- phosph ate 5- kinase isolog [Arabi dopsis thalia na]

171217	ATU033 157	ATL8C4 0691:1 092..1	nap				ATL8C4 0691:1 031..8 5	0.43	g33778 16	40	1365	4.8e- 130	(AF076 275) contai ns simila rity to Arabid opsis thalia na retrot ranspo son Athila (GB:X8 1801) [Arabi dopsis thalia na]
171218	ATU033 158	ATL8C2 3912:1 ..604	nap				ATL8C2 3912:1 01..56 8	0.43	g42043 02	40	210	6.5e- 21	(AC003 027) Hypoth etical protei n [Arabi dopsis thalia na]
171219	ATU033 159	ATL8S1 2659:1 ..473	nap				ATL8S1 2659:1 13..41 7	0.43	g22669 41	40	535	8.5e- 52	(AF009 036) NAD(+) - isocit rate dehydr ogenas e

171220	ATU033 160	ATL8C2 7476:1 ..394	nap				ATL8C2 7476:8 8..270	0.42	g24602 03	40	297		subunit I [Ajellomyces capsulatus] (AF021 244) corona tine- induced protein 1 [Arabidopsis thaliana]
171221	ATU033 161	ATL8S1 1908:1 ..470	nap				ATL8S1 1908:6 5..458	0.41	g26492 90	40	158	4.2e- 12	(AE001 015) 3- ketoacyl-CoA thiolase (acaB- 11) [Archaeoglobus fulgidus]
171222	ATU033 162	ATL8S4 080:63 ..623	nap						g42621 64	40	149	4.6e- 17	(AC005 275) putative ubiquitin- like protein

171223	ATU033 163	ATL8S2 7766:4 29..1	nap										g48369 41	40	218	5.9e- 24	n [Arabi dopsis thalia na]
171224	ATU033 164	ATL8C2 2753:6 93..1	nap										g28298 96	40	677	6.9e- 67	(AC002 311) highly simila r to auxin- regula ted protei n GH3, gp X60 033 18 591 [Arabi dopsis thalia na]
171225	ATU033 165	ATL8C8 431:15 00..19 68	nap										g15523 79	40	232	3.6e- 23	(Y0815 5) pectin methyl esterase [Silen e]

171226	ATU033 166	ATL8C2 3632:8 97..37	nap								g22449 04	40	91	1.9e- 13	latifo lia ssp. alba] (Z9733 9) simila r to hypothe tical protei n C02F5. 7 - Caenor ha [Arabi dopsis thalia na]
171227	ATU033 167	ATL8C3 690:55 63..52 76	nap								g46999 43	40	357	1.6e- 32	(AC007 166) hypothe tical protei n [Arabi dopsis thalia na]
171228	ATU033 168	ATL8C4 5357:1 ..372	nap								g47139 51	40	200	1.3e- 18	(AC007 293) hypothe tical protei n [Arabi dopsis thalia na]

171229	ATU033 169	ATL8C4 9265:1 577..2 189	nap							g30470 97	40	448	3.1e- 27	(AF058 826) contai ns simila rity to transp osases [Arabi dopsis thalia na]
171230	ATU033 170	ATL8C1 987:1. .473	nap							g44907 47	40	656	2.2e- 54	(AL035 708) DnaJ- like protei n [Arabi dopsis thalia na]
171231	ATU033 171	ATL8C1 7764:1 ..656	nap							g42493 88	40	382	5.3e- 36	(AC005 966) Simila r to gb AF0 25438 Opa- intera cting protei n (OIP2) from Homo sapien s. [Arabi

171239	ATU033 179	ATL8C1 4595:7 28..1	nap										g31767 17	40	233	1.0e- 25	n [Arabi dopsis thalia na]
171240	ATU033 180	ATL8C2 7224:1 ..437	nap										g38057 63	40	261	4.7e- 25	(AC002 392) putati ve pectin estera se [Arabi dopsis thalia na]
171241	ATU033 181	ATL8S1 5828:4 63..24	nap										g13444 1	40	154	4.6e- 13	(AC005 693) hypoth etical protei n [Arabi dopsis thalia na]
171242	ATU033 182	ATL8C2 0672:5	nap										g45443 72	40	1737	3.4e- 227	PHOSPH OSERIN E AMINOT RANSFE RASE (PSAT) [Yersi nia entero coliti ca] (AC006 920)

171247	186	6249:1 ..619	nap							85	40	1509	27	505) putati ve beta- 1,3- glucan ase [Arabi dopsis thalia na]
	ATU033 187	ATL8C3 3482:1 897..1								g21092 75			2.4e- 147	(U9710 6) downy mildew resist ance protei n RPP5 [Arabi dopsis thalia na]
171248	188	ATL8S1 9136:1 49..56 1	nap							g40068 89	40	606	4.3e- 58	(Z9970 8) putati ve protei n [Arabi dopsis thalia na]
171249	189	ATL8C1 2224:1 ..1803	nap							g26424 31	40	2330	2.1e- 230	(AC002 391) putati ve retrot ranspo son

171257	ATU033 197	ATL8C1 4396:2 080..2 688	nap										g15237 96	40	706	1.6e- 85	(X9786 4) cytoch rome P450 [Arabi dopsis thalia na] []	o chloro plast [Nicot iana tabacu m]
171258	ATU033 198	ATL8C4 3725:1 ..559	nap										g45672 95	40	608		(AC006 918) putati ve pol polypr otein [Arabi dopsis thalia na] []	
171259	ATU033 199	ATL8S2 4289:5 36..1	nap										g33353 50	40	700	1.3e- 70	(AC004 512) Simila r to gb 284 386 anthra nilate N- hydrox ycinna moyl/b enzoyl	

171260	ATU033 200	ATL8C1 0840:1 747..8 02	nap										g35229 37	40	630	1.4e- 53	(AC004 411) unknown protein [Arabi dopsis thalia na]	transf erase from Dianth us caryop hyllus [Arabi dopsis thalia na]
171261	ATU033 201	ATL8C2 4231:1 176..1	nap										g25860 83	40	703	1.1e- 64	(U7272 5) recept or kinase -like protei n [Oryza longis tamina ta]	(U7272 5) recept or kinase -like protei n [Oryza longis tamina ta]
171262	ATU033 202	ATL8C5 36:653 ..1	nap										g45860 58	40	220	6.8e- 10	(AC007 020) unknown protei n	(AC007 020) unknown protei n

171266	ATU033 206	ATL8S8 693:1. .431	nap									g30212 64	40	635	2.7e- 63	dopsis thalia na] (AL022 347) putati ve protei n [Arabi dopsis thalia na]
171267	ATU033 207	ATL8C1 5971:4 115..2 509	nap									g45811 11	40	1197	7.5e- 100	(AC005 825) putati ve revers e transc riptas e [Arabi dopsis thalia na]
171268	ATU033 208	ATL8C5 239:16 38..1	nap									g28282 84	40	556	6.8e- 36	(AL021 687) hypoth etical protei n [Arabi dopsis thalia na]
171269	ATU033 209	ATL8C1 5408:6 77..10 11	nap									g46783 64	40	122	5.9e- 06	(AL049 659) putati ve

171274	ATU033 214	ATL8S8 734:1. .462	nap					1.00	g45391 91	39	362	8.1e- 29	riboso mal protei n l12 [Arabi dopsis thalia nal] (AL049 485) probab le acyl- CoA dehydr ogenas e [Strep tomyce s coelic olor]
171275	ATU033 215	ATL8S9 587:51 6..1	nap						g73240 4	40	351	1.9e- 35	HYPOTH ETICAL 46.0 KD PROTEI N IN FEUA 5'REGI ON PRECUR SOR (ORF2) [Bacil lus subtil is]
171276	ATU033 216	ATL8C1 3855:1	nap						g40192 75	40	172	0.010	(AF083 424)

171281	ATU033 221	82..1	nap										g19139 30	40	171	2.7e- 16	(X8981 0) putati ve integr al protei n [Bacil lus subtil is]	putati ve polyga lactur onase [Arabi dopsis thalia na]
171282	ATU033 222	ATL8S1 828:1. .144	nap										g77341 4	40	120	0.27	(U2375 1) beta galact osidas e [Cloni ng vector pBBR1M CS-5]	putati ve polyga lactur onase [Arabi dopsis thalia na]
171283	ATU033 223	ATL8C2 5733:1 733..1 401	nap										g34618 20	40	152	3.7e- 07	(AC004 138) unknow n protei n [Arabi dopsis]	putati ve polyga lactur onase [Arabi dopsis thalia na]

171298	237	323:26 5..1							08				17	747) hypoth etical protei n [Arabi dopsis thalia na]
171298	ATU033 238	ATL8C4 8997:1 56..62 7	nap						g46782 80	40	551	3.3e- 58	(AL049 660) zinc finger -like protei n [Arabi dopsis thalia na]	
171299	ATU033 239	ATL8C1 8695:1 099..1	nap						g21298 44	40	407	4.4e- 22	stress - induce d protei n stil - soybea n []	
171300	ATU033 240	ATL8C3 9111:8 77..1	nap						g40068 79	40	507	4.9e- 44	(Z9970 7) hypoth etical protei n [Arabi dopsis thalia na]	
171301	ATU033	ATL8C1	nap						g20886	40	360		(AF002	

241	94:1.. 579									51						109) hypers ensiti vity- relate d gene 201 isolog [Arabi dopsis thalia na]
171302	ATU033 242	ATL8C1 7714:3 43..81 2	nap							g47339 60	40	385	5.3e- 33	(AC007 294) putati ve zinc- finger protei n [Arabi dopsis thalia na]		
171303	ATU033 243	ATL8S1 6648:1 ..582	nap							g38589 36	40	329	6.4e- 23	(AL021 636) putati ve protei n [Arabi dopsis thalia na]		
171304	ATU033 244	ATL8C2 3280:1 534..2 01	nap							g32978 21	40	665	1.3e- 05	(AL031 032) extens in- like protei		

	253	8496:7 59...25 2								75						52	278) F15k9. 21 [Arabi dopsis thalia na]
171314	ATU033 254	ATL8S1 2769:3 41...64 0	nap							g29807 60	40	214	3.2e- 17	(AL022 198) putati ve protei n [Arabi dopsis thalia na]			
171315	ATU033 255	ATL8C8 711:23 89...30 08	nap							g40380 55	40	918	1.5e- 118	(AC005 897) putati ve cytoch rome P450 [Arabi dopsis thalia na]			
171316	ATU033 256	ATL8C3 2713:1 162...1 674	nap							g45811 43	40	200	6.2e- 20	(AC006 919) hypothe tical protei n [Arabi dopsis thalia na]			
171317	ATU033 257	ATL8S2 2280:1	nap							g17857 24	40	132	0.0003 3	(Y0850 1)			

171318	ATU033 258	55..21 ATL8C4 3710:4 130..1 803	nap							943888 18	40	425		orfl10 b [Arabi dopsis thalia na] (AC006 528) putati ve pol ypr ote in with a Zn- finger CCHC type domain (prosi te:QDO C50158) and a DDE integr ase signat ure motif [Arabi dopsis thalia na]
171319	ATU033 259	ATL8C4 7717:7 16..18 89	nap							931766 65	40	176	2.2e- 14	(AC004 393) T1F15. 9 [Arabi dopsis thalia na]

171320	ATU033 260	ATL8C6 675:12 69..80 7	nap							g45858 81	40	179	6.2e- 16	(AC005 850) Hypoth etical protei n [Arabi dopsis thalia na]
171321	ATU033 261	ATL8C4 3893:3 98..80	nap							g42621 75	40	376		(AC005 508) 12894 [Arabi dopsis thalia na]
171322	ATU033 262	ATL8S2 5669:1 ..470	nap							g27603 17	40	224	1.7e- 11	(AC002 130) F1N21. 1 [Arabi dopsis thalia na]
171323	ATU033 263	ATL8S4 396:1. ..334	nap							g46783 73	40	169	2.6e- 09	(AL049 656) putati ve protei n [Arabi dopsis thalia na]
171324	ATU033 264	ATL8C1 025:35 ..851	nap							g28326 68	40	506	3.8e- 39	(AL021 712) putati ve protei

171325	ATU033 265	ATL8C1 6239:2 366..2 025	nap										g45103 47	40	459	1.1e- 40	n [Arabi dopsis thalia na] (AC006 921) hypoth etical protei n [Arabi dopsis thalia na]
171326	ATU033 266	ATL8C7 096:17 69..1	nap										g41851 44	40	117	0.015	(AC005 724) unknow n protei n [Arabi dopsis thalia na]
171327	ATU033 267	ATL8C1 2862:5 56..37 22	nap										g44553 31	40	538	9.5e- 52	(AL035 525) putati ve protei n [Arabi dopsis thalia na]
171328	ATU033 268	ATL8C4 355:62 3..143 4	nap										g17527 34	40	624	6.4e- 48	(D7851 0) beta- glucan _

171329	ATU033 269	ATL8S1 0470:6 42..18	nap								943887 32	40	353	1.2e- 29	(AC006 413) putati ve Athila retroe lement ORF 2 protei n [Arabi dopsis thalia na]
171330	ATU033 270	ATL8C3 8631:2 83..99 3	nap								g35102 52	40	160	3.1e- 13	(AC005 310) putati ve RNA- bindin g protei n [Arabi dopsis thalia na]
171331	ATU033 271	ATL8C6 958:99 3..536	nap								g15523 79	40	441	2.3e- 41	(Y0815 5) pectin methyl estera se

171332	ATU033 272	ATL8C2 8886:1 ..1054	nap							g38602 71	40	1626	8.3e- 166	(AC005 824) putati ve seleni um- bindin g protei n [Arabi dopsis thalia nal]
171333	ATU033 273	ATL8C1 6735:6 12..96 1	nap							g45389 69	40	113	2.5e- 10	(AL049 488) putati ve protei n [Arabi dopsis thalia nal]
171334	ATU033 274	ATL8C1 4721:1 086..1 360	nap							g30470 70	40	180	4.9e- 14	(AF058 825) No defini tion line found [Arabi dopsis thalia

171335	ATU033 275	ATL8C3 867:66 3..119	nap							944690 08	40	610	5.5e- 54	na] (AL035 602) UDP, rhamno se-- anthoc yanidi n-3- glucos ide rhamno syltra nsfera se- like protei n [Arabi dopsis thalia na]
171336	ATU033 276	ATL8S2 5633:6 13..1	nap							947739 20	40	384	1.9e- 55	(AF147 259) F10A2. 17 gene produc t [Arabi dopsis thalia na]
171337	ATU033 277	ATL8C2 160:97 7..122 4	nap							940068 23	40	75	0.0079	(AC005 970) hypoth etical protei n [Arabi

171338	ATU033 278	ATL8S1 8985:1 ..592	nap				ATL8S1 8985:5 4..526	0.99	g31278 36	39	480	9.4e- 43	dopsis thalia na] (AL023 496) hypoth etical protei n [Strep tomyce s coelic olor]
171339	ATU033 279	ATL8S2 9806:5 39..1	nap				ATL8S2 9806:4 65..15	0.99	g33197 31	39	643	1.4e- 56	(AL031 035) aminot ransfe rase [Strep tomyce s coelic olor]
171340	ATU033 280	ATL8C3 7678:3 89..75 5	nap				ATL8C3 7678:3 89..71 5	0.99	g45394 24	39	559	6.2e- 55	(AL049 171) steroi d sulfot ransfe rase- like protei n [Arabi dopsis thalia na]
171341	ATU033 281	ATL8S9 273:1.	nap				ATL8S9 273:21	0.98	g35401 86	39	493	1.6e- 50	(AC004 122)

171345	ATU033 285	ATL8C3 829:49 5..1	nap					ATL8C3 829:44 7..8	0.98	g13461 86	39	589	6.2e- 57	otein, 3', partia 1 [Arabi dopsis thalia na]
														GLUTAM ATE-1- SEMIAL DEHYDE 2,1- AMINOM UTASE (GSA) (GLUTA MATE- 1- SEMIAL DEHYDE AMINOT RANSFE RASE) (GSA- AT) [Pseud omonas aerugi nosa]
171346	ATU033 286	ATL8S2 6469:1 ..680	nap					ATL8S2 6469:1 01..55 9	0.98	g31842 81	39	584	(AC004 136) putati ve cytoch rome P450 [Arabi dopsis thalia	

171347	ATU033 287	ATL8S1 0035:1 ..305	nap				ATL8S1 0035:8 4..305	0.97	g44269 08	39	413	2.1e- 32	na] (AF111 840) S- adenos yl methio nine decarb oxylas e proenz yme [Xanth omonas campes tris]
171348	ATU033 288	ATL8C1 4465:2 961..1 376	nap				ATL8C1 4465:2 754..1 446	0.97	g47411 90	39	1138	7.8e- 111	(AL049 746) ABC- type transp ort- like protei n [Arabi dopsis thalia na]
171349	ATU033 289	ATL8C3 8642:3 05..1	nap				ATL8C3 8642:3 05..57	0.97	g45803 82	39	269	2.1e- 24	(AC007 184) putati ve MADS- Box transc riptio n factor

171350	ATU033 290	ATL8C1 3094:1 436..1 23	nap				ATL8C1 3094:7 19..12 3	0.97	g35488 04	39	698	4.2e- 41	[Arabi dopsis thalia na] (AC005 313) unknow n protei n [Arabi dopsis thalia na]
171351	ATU033 291	ATL8C3 5089:1 517..1	nap				ATL8C3 5089:1 517..8 75	0.96	g33193 45	39	520	2.2e- 46	(AF077 407) contai ns simila rity to maize transp oson MuDR (GB:M7 6978) [Arabi dopsis thalia na]
171352	ATU033 292	ATL8C3 8407:1 ..622	nap				ATL8C3 8407:5 6..474	0.96	g26641 0	39	173	1.0e- 15	CDC2+/ CDC28- RELATE D PROTEI N KINASE R2 [Oryza

171353	ATU033 293	ATL8C2 9138:1 87..18 32	nap				ATL8C2 9138:1 88..17 48	0.96	g19249 72	39	816	2.3e- 57	(U5204 8) polyri bonucl eotide phopho rylase [Spina cia olerac ea]
171354	ATU033 294	ATL8C4 9908:1 474..1	nap				ATL8C4 9908:1 084..4 89	0.95	g21601 80	39	1253	2.5e- 136	(AC000 132) No defini tion line found [Arabi dopsis thalia na]
171355	ATU033 295	ATL8C1 4482:1 ..763	nap				ATL8C1 4482:9 ..751	0.94	g22621 03	39	380	1.5e- 42	(AC002 343) unknow n protei n [Arabi dopsis thalia na]
171356	ATU033 296	ATL8C1 2858:1 166..1	nap				ATL8C1 2858:7 03..7	0.94	g40493 40, g22810 82	39, 38	466, 200	3.7e- 35, 1.8e- 14	(AL034 567) putati ve protei n

171357	ATU033 297	ATL8C3 5742:2 884..3 295	nap						0.94	g42043 11	39	407	3.8e- 39	[Arabi dopsis thalia nal; (AC002 333) polyga lactur onase isolog , 3' partia l [Arabi dopsis thalia nal]
171358	ATU033 298	ATL8C3 0092:1 485..2 550	nap						0.94	g32362 49	39	830	2.7e- 73	(AC004 684) hypoth etical protei n [Arabi dopsis thalia nal]

171359	ATU033 299	ATL8S2 2632:4 92..1	nap			ATL8S2 2632:3 03..7	0.93	g38734 02	39	570	4.8e- 57	(U1712 9) unknown [Rhodo coccus erythr opolis]
171360	ATU033 300	ATL8C3 5861:1 ..1119	nap			ATL8C3 5861:5 67..58	0.93	g42635 42	39	746	8.9e- 58	(AC006 250) putati ve retrot ranspo son pol protei n [Arabi dopsis thalia na]
171361	ATU033 301	ATL8C7 204:15 73..74	nap			ATL8C7 204:15 71..74	0.93	g22448 60	39	372	1.2e- 39	(Z9733 7) cucumi sin [Arabi dopsis thalia na]
171362	ATU033 302	ATL8S1 1942:5 20..1	nap			ATL8S1 1942:5 20..10 0	0.93	g32361 10	39	69	0.0028	(AJ001 103) arca [Lacto coccus lactis]
171363	ATU033 303	ATL8C1 9411:1	nap			ATL8C1 9411:4	0.92	g29613 49	39	1519	6.3e- 187	(AL022 140)

171364	ATU033 304	..1313	nap	ATL8S1 2539:1 ..309						2..131 3	0.91	g38853 38	39	229	2.3e- 11	(AC005 623) unknown protein [Arabi dopsis thalia na]
171365	ATU033 305	ATL8C1 5227:9 9..178 4	nap							ATL8C1 5227:1 366..1 56	0.90	g28646 20	39	147	4.0e- 06	(AL021 811) hypoth etical protein [Arabi dopsis thalia na]
171366	ATU033 306	ATL8C4 5032:1 169..1	nap							ATL8C4 5032:8 66..89	0.90	g44159 11	39	931	1.9e- 102	(AC006 282) putati ve polyA bindin g protein

171367	ATU033 307	ATL8S2 5657:5 68..1	nap						ATL8S2 5657:5 46..54	0.89	g11550 68	39	95	0.057	(X9497 6) cell wall- plasma membra ne linker protei n [Brass ica napus]	[Arabi dopsis thalia na]
171368	ATU033 308	ATL8C3 8009:1 ..1313	nap						ATL8C3 8009:1 00..10 55	0.89	g21911 93	39	1499	3.9e- 115	(AF007 271) contai n simila rity to type 1 inosit ol 1,4,5- tripho sphate recept ors [Arabi dopsis thalia na]	
171369	ATU033 309	ATL8C1 4313:3 32..20 33	nap						ATL8C1 4313:3 32..12 37	0.89	g45859 86	39	90	0.93	(AC005 287) Hypoth etical	

171370	ATU033 310	ATL8C5 795:10 82..1	nap						ATL8C5 795:10 36..48	0.89		g46801 80	39	853	(AF111 709) polypr oteins [Oryza sativa subsp. indica]	protein [Arabi dopsis thalia na]
171371	ATU033 311	ATL8C1 4490:8 29..1	nap						ATL8C1 4490:7 83..27 2	0.87		g47739 20	39	995	(AF147 259) F10A2. 17 gene produc t [Arabi dopsis thalia na]	2.3e- 78
171372	ATU033 312	ATL8C2 5213:3 087..1 079	nap						ATL8C2 5213:3 010..1 079	0.87		g22136 20	39	650	(AC000 103) F21J9. 13 [Arabi dopsis thalia na]	1.4e- 68
171373	ATU033 313	ATL8C3 0836:7 25..1	nap						ATL8C3 0836:5 73..45 4	0.87		g44552 44	39	194	(AL035 523) MtN3- like protein	1.3e- 18

171374	ATU033 314	ATL8C1 8547:9 62..1	nap					ATL8C1 8547:7 96..28	0.87	g45593 47	39	97	2.8e- 12	(AC006 585) putati ve extens in [Arabi dopsis thalia na]
171375	ATU033 315	ATL8C3 3795:2 661..1	nap					ATL8C3 3795:7 98..28	0.86	g28326 46, g45393 73	39, 34	602, 1040	1.7e- 46, 5.0e- 79	(AL021 710) MuDR transp osable elemen t - like protei n [Arabi dopsis thalia na]; (AL049 525) putati ve retrot ranspo son polypr otein [Arabi dopsis thalia

171376	ATU033 316	ATL8C4 01:1.. 519	nap				ATL8C4 01:121 ..519	0.86	g37383 24	39	237	3.9e- 16	na] (AC005 170) GMP syntha se- like protei n [Arabi dopsis thalia na]
171377	ATU033 317	ATL8C3 6298:1 673..1 74	nap				ATL8C3 6298:1 511..1 74	0.86	g19316 49	39	504	5.9e- 41	(U9597 3) DNA helica se isolog [Arabi dopsis thalia na]
171378	ATU033 318	ATL8C1 9886:1 182..1	nap				ATL8C1 9886:1 010..1 16	0.85	g34026 77	39	492	4.8e- 36	(AC004 697) hypoth etical protei n [Arabi dopsis thalia na]
171379	ATU033 319	ATL8C3 3216:1 ..2319	nap				ATL8C3 3216:6 0..212 8	0.85	g24438 81	39	2037	6.6e- 183	(AC002 294) contai ns beta- transd ucin motif

171380	ATU033 320	ATL8C4 5174:2 226..1 097	nap						ATL8C4 5174:2 226..1 097	0.85	g42621 65	39	137	1.4e- 06	(AC005 275) putati ve ubiqui tin- like protei n [Arabi dopsis thalia na]
171381	ATU033 321	ATL8C4 8402:1 021..1	nap						ATL8C4 8402:1 021..1 48	0.85	g27393 82	39	696	5.2e- 51	(AC002 505) myosin heavy chain- like protei n [Arabi dopsis thalia na]
171382	ATU033 322	ATL8C4 9330:1 ..550	nap						ATL8C4 9330:4 5..504	0.85	g44328 51	39	255	2.7e- 28	(AC006 300) hypoth etical protei n [Arabi dopsis thalia na]
171383	ATU033	ATL8S1	nap						ATL8S1	0.84	g12372	39	260	1.9e-	(X9678

	323	820:59 0..1							820:14 8..19		50			25	4) cytoch rome P450 [Nicot iana tabacu m]
171384	ATU033 324	ATL8C4 8387:1 696..9 51	nap						ATL8C4 8387:1 466..9 51	0.84	g30471 04	39	334	2.6e- 28	(AF058 919) No defini tion line found [Arabi dopsis thalia nal]
171385	ATU033 325	ATL8C4 6016:1 ..4543	nap						ATL8C4 6016:2 40..45 16	0.84	g39351 38	39	675	2.2e- 55	(AC005 106) T25N20 .2 [Arabi dopsis thalia nal]
171386	ATU033 326	ATL8C2 7099:4 25..21 87	nap						ATL8C2 7099:4 25..18 81	0.84	g31231 61	39	176	1.1e- 10	HYPOTH ETICAL 77.0 KD TRP- ASP REPEAT S CONTAI NING PROTEI N F35G12

171387	ATU033 327	ATL8C1 7011:1 ..1574	nap							ATL8C1 7011:3 57..13 59	0.83	g48368 93	39	912	5.3e- 76	.4 IN CHROMO SOME III [] (AC007 369) pyroph osphat e- depend ent phosph ofruct okinas e alpha subuni t [Arabi dopsis thalia na]
171388	ATU033 328	ATL8C2 8832:1 073..1	nap							ATL8C2 8832:1 060..1 71	0.83	g35102 53	39	321	6.5e- 21	(AC005 310) hypoth etical protei n [Arabi dopsis thalia na]
171389	ATU033 329	ATL8C1 8095:1 ..282	nap							ATL8C1 8095:5 8..282	0.82	g73237 2	39	165	1.1e- 13	HYPOTH ETICAL OXIDOR EDUCTA SE IN PTA- ROCC

171390	ATU033 330	ATL8C3 6556:1 ..4010	nap					ATL8C3 6556:8 7..358 , ATL8C3 6556:6 87..38 38	0.82, 0.61			g21044 38	39	563	1.7e- 28	INTERG ENIC REGION [Bacil lus subtil is] (Z9539 6) putati ve ubiqui tin transf erase [Schiz osacch aromyc es pombel] (AF077 408) contai ns simila rity to Vicia faba retrot ranspo son- like gene (GB:AB 007467) [Arabi dopsis thalia
171391	ATU033 331	ATL8C1 8590:1 ..2124	nap					ATL8C1 8590:7 8..698	0.82			g33193 60	39	729	3.3e- 188	

171392 171393 171394
 171392 171393 171394
 171392 171393 171394

171392	ATU033 332	ATL8C2 3442:8 331..6 411	nap				ATL8C2 3442:8 256..6 492	0.80	g42635 44	39	2083	2.2e- 181	na] (AC006 250) putati ve Athila retroee lement ORF1 protei n [Arabi dopsis thalia na]
171393	ATU033 333	ATL8S1 4552:1 ..692	nap				ATL8S1 4552:3 4..679	0.80	g14903 22	39	708	2.8e- 64	(X9967 8) oxaloe cetate decarb oxylas e alpha- chain [legio nella pneumo phila]
171394	ATU033 334	ATL8S1 4906:4 19..1	nap				ATL8S1 4906:4 19..36 6	0.80	g45875 66	39	278	8.0e- 27	(AC006 550) Contai ns 2 PF1004 00 WD40, G-beta repeat s. [Arabi dopsis

171395	ATU033 335	ATL8S2 1265:4 60..1	nap				ATL8S2 1265:4 56..10 9	0.79	g33782 62	39	216	1.6e- 12	thalia na] (AF079 317) unknown n [Sphin gomona s aromat icivor ans]
171396	ATU033 336	ATL8C1 4458:4 160..1 279	nap				ATL8C1 4458:2 414..1 279	0.78	g43098 68	39	882	2.4e- 42	(AC006 527) putati ve retrot ranspo son- like orf [Arabi dopsis thalia na]
171397	ATU033 337	ATL8S1 997:55 0..1	nap				ATL8S1 997:31 7..1	0.77	g51489	39	873	5.3e- 62	(X1667 0) open readin g frame (461 AA) contai ning a duplic ated 66bp region of

171398	ATU033 338	ATL8S2 4374:1 ..407	nap				ATL8S2 4374:2 68..40 7	0.77	g38602 53	39	171	4.9e- 18	(AC005 824) hypoth etical protei n [Arabi dopsis thalia nal]
171399	ATU033 339	ATL8C3 2756:1 269..1	nap				ATL8C3 2756:1 016..1 4	0.77	g44552 94	39	404	5.5e- 47	(AL035 528) putati ve protei n [Arabi dopsis thalia nal]
171400	ATU033 340	ATL8C4 0680:8 50..1	nap*				ATL8C4 0680:4 98..20 6	0.76	g30471 04	39	702	1.9e- 75	(AF058 919) No defini tion line found [Arabi dopsis thalia nal]
171401	ATU033 341	ATL8C4 4082:2 20..46 9	nap				ATL8C4 4082:2 80..30 9	0.76	g68272 8	39	235	1.1e- 23	(I4003 1) S- adenos yl-L-

171402	ATU033 342	ATL8C3 9981:9 29..1	nap				ATL8C3 9981:6 15..27	0.76	g44553 03	39	685	6.7e- 59	methionine:trans-caffeoyl-Coenzyme A 3-O-methyltransferase [Arabis dopsis thaliana]
171403	ATU033 343	ATL8C7 686:53 ..971	nap				ATL8C7 686:53 ..877	0.75	g48352 45	39	305	6.4e- 30	(AL049862) putative mitochondrial protein [Arabis dopsis thaliana]
171404	ATU033 344	ATL8C2 7489:3	nap				ATL8C2 7489:3	0.75	g22810 96	39	429		(AC002333)

171405	ATU033 345	28..68 0	nap				49..58 2	0.75	g44159 41	39	321		hypothetical protein [Arabidopsis thaliana]
		ATL8C3 7151:9 96..1	nap				ATL8C3 7151:9 96..73	0.75	g44159 41	39	321		(AC006418) putative arginine-serine rich splicing factor [Arabidopsis thaliana]
171406	ATU033 346	ATL8C2 8941:1 ..199	nap				ATL8C2 8941:1 43..19 6	0.75	g29822 93	39	98	0.0048	(AF051231) ISP42-like protein [Picea mariana]
171407	ATU033 347	ATL8C1 091:81 2..53	nap				ATL8C1 091:31 3..86	0.74	g32427 11	39	692	2.2e-82	(AC003040) hypothetical protein [Arabidopsis thaliana]

171408	ATU033 348	ATL8C3 5960:1 ..682	nap				ATL8C3 5960:2 6..676	0.74	g44688 10	39	123	1.4e- 14	thalia nal (AL035 601) putati ve protei n [Arabi dopsis thalia nal]
171409	ATU033 349	ATL8C1 1308:5 79..15 21	nap				ATL8C1 1308:5 79..10 49	0.74	g38941 87	39	567	5.7e- 59	(AC005 662) hypoth etical protei n [Arabi dopsis thalia nal]
171410	ATU033 350	ATL8S4 259:50 0..1	nap				ATL8S4 259:45 1..54	0.74	g27078 99	39	268	2.4e- 23	(AF038 380) FtsA [Pseud omonas putida]
171411	ATU033 351	ATL8S2 5239:4 52..1	nap				ATL8S2 5239:4 52..22 5	0.74	g45126 57	39	556	1.6e- 55	(AC006 931) putati ve APG protei n [Arabi dopsis thalia nal]
171412	ATU033	ATL8C4	nap				ATL8C4	0.74	g47582	39	392	6.1e-	glutam

171413	352	7481:3 741..1					7481:1 133..8 4	94	39	105	3.0e- 05	yl- prolyl -tRNA synthe tase [Homo sapien s]
	ATU033 353	ATL8C6 273:1. .362	nap				ATL8C6 273:13 0..228	g21941 34	39	105	3.0e- 05	(AC002 062) No defini tion line found [Arabi dopsis thalia na]
171414	ATU033 354	ATL8C1 4502:3 945..8 296	nap				ATL8C1 4502:3 945..8 171	g21941 17	39	729	9.2e- 72	(AC002 062) Strong simila rity to Arabid opsis recept or protei n kinase PR5K (gb AT U48698). [Arabi dopsis thalia na]

171415	ATU033 355	ATL8S2 143:1. .467	nap				ATL8S2 143:53 ..417	0.73	g22448 18	39	591	7.7e- 48	(Z9733 6) hypoth etical protei n [Arabi dopsis thalia na]
171416	ATU033 356	ATL8C1 9370:1 737..1	nap				ATL8C1 9370:1 636..3 5	0.73	g45396 60	39	2088	9.7e- 215	(AF061 282) polypr oteins [Sorgh um bicolor r]
171417	ATU033 357	ATL8C3 0517:1 ..1154	nap				ATL8C3 0517:5 0..719	0.72	g31579 38	39	977	2.4e- 84	(AC002 131) Simila r to seryl- tRNA synthe tase gb U10 400 from S cerevi siae. EST gb N96 627 comes from this gene. [Arabi dopsis

171418	ATU033 358	ATL8C9 147:11 46..23 8	nap				ATL8C9 147:99 0..252	0.72	g44067 59	39	187	thalia nal (AC006 836) hypoth etical protei n [Arabi dopsis thalia nal]
171419	ATU033 359	ATL8S2 5201:5 2..549	nap				ATL8S2 5201:1 11..50 7	0.72	g34492 69	39	166	(AL031 317) hypoth etical protei n SC6G4. 35 [Strep tomyce s coelic olor]
171420	ATU033 360	ATL8S8 825:43 1..34	nap				ATL8S8 825:35 7..34	0.72	g30251 96	39	341	HYPOTH ETICAL 34.2 KD PROTEI N IN GSP- HYBG INTERG ENIC REGION [Esche richia coli]
171421	ATU033	ATL8S2	nap				ATL8S2	0.71	g22227	39	320	(X7924

171422	ATU033 362	5420:1 ..458	nap					5420:4 2..412	0.70	g41057 09	39	86	30	2) cytoch rome [Parac occus denitr ifican s]
		ATL8S2 8914:1 ..577						ATL8S2 8914:6 3..531					3.0e- 10	(AF049 851) ethylb enzyme diox yg enase large subuni t [Pseud omonas fluore scens]
171423	ATU033 363	ATL8C2 2090:1 ..1931	nap					ATL8C2 2090:2 88..18 56	0.69	g37859 84	39	1875	1.6e- 196	(AC005 560) putati ve revers e transc riptas e [Arabi dopsis thalia na]
171424	ATU033 364	ATL8C2 9709:1 ..543	nap					ATL8C2 9709:9 7..402	0.69	g45672 95	39	567	7.5e- 38	(AC006 918) putati ve pol ypr otein

171425	ATU033 365	ATL8C4 1486:1 46..91 4	nap					ATL8C4 1486:2 05..91 4	0.69	g12356 80	39	902	3.3e- 95	[Arabi dopsis thalia na] (U4869 8) recept or serine /threo nine kinase PR5K [Arabi dopsis thalia na]
171426	ATU033 366	ATL8C9 663:1. .1860	nap					ATL8C9 663:56 ..1860	0.69	g13621 62	39	552	1.5e- 41	beta- glucos idase BGQ60 precu sor - barley [Horde um vulgar el]
171427	ATU033 367	ATL8C4 5560:7 36..1	nap					ATL8C4 5560:7 36..15 1	0.69	g48877 56	39	688	4.5e- 62	(AC006 533) putati ve protei n kinase [Arabi dopsis thalia na]
171428	ATU033	ATL8C3	nap					ATL8C3	0.69	g43887	39	693	2.7e-	(AC006

171429	368	312:13 59..20 86					312:19 93..15 71	24				59	413) putati ve Athila ORF1 protei n [Arabi dopsis thalia na]
	ATU033 369	ATL8C1 046:15 87..36 9	nap				ATL8C1 046:13 71..41 4	0.68	g43097 55	39	467	6.8e- 32	(AC006 217) putati ve transp osase [Arabi dopsis thalia na]
171430	ATU033 370	ATL8S2 5804:4 94..36	nap				ATL8S2 5804:3 64..36	0.68	g28514 90	39	83	1.4e- 05	RESPON SE REGULA TOR GACA (GLOBA L ACTIVA TOR) [Pseud omonas aerugi nosa]
171431	ATU033 371	ATL8C2 6903:1 ..780	nap				ATL8C2 6903:3 29..78 0	0.67	g42621 62	39	403	1.4e- 41	(AC005 275) putati ve glycos ylatio

171432	ATU033 372	ATL8S1 8862:1 ..597	nap						ATL8S1 8862:8 5..510	0.67		g34147 26	39	606	2.3e- 59	n enzyme [Arabi dopsis thalia na]
171433	ATU033 373	ATL8C2 3467:2 422..4 26	nap						ATL8C2 3467:2 298..4 26	0.66		g30437 26	39	489	1.5e- 53	(AB011 173) KIAA06 01 protei n [Homo sapien s]
171434	ATU033 374	ATL8C3 542:1. .653	nap						ATL8C3 542:33 7..584	0.66		g47340 10	39	763	2.3e- 78	(AC007 178) hypoth etical protei n [Arabi dopsis thalia na]
171435	ATU033	ATL8S1	nap						ATL8S1	0.65		g28268	39	198	1.1e-	(Y1631

171438	ATU033 378	ATL8S3 0775:3 7..562	nap				ATL8S3 0775:1 00..55 2	0.64	g38613 35	39	475	1.2e- 47	na] (AJ235 273) unknown n [Ricke ttsia prowaz ekil]
171439	ATU033 379	ATL8C6 787:1. .607	nap				ATL8C6 787:30 3..589	0.64	g42622 10	39	325	2.9e- 34	(AC006 161) simila r to leucin e zipper transc riptio n factor [Arabi dopsis thalia na]
171440	ATU033 380	ATL8S1 1353:1 ..274	nap				ATL8S1 1353:4 7..274	0.64	g20726 75	39	334	7.5e- 24	(Z9512 0) hypothe tical protei n Rv3210 c [Mycob acteri um tuberc ulosis]
171441	ATU033 381	ATL8C2 3742:8	nap				ATL8C2 3742:1	0.64	g48039 33	39	310	1.2e- 11	(AC006 264)

171442	ATU033 382	60..27 01	nap				779..9 22	0.63	g37860 15	39	151		putative diseases resistance response protein [Arabidopsis thaliana]
	ATL8C3 7075:1 ..654						ATL8C3 7075:1 24..57 0						(AC005 499) hypothetical protein [Arabidopsis thaliana]
171443	ATU033 383	ATL8C3 4564:7 42..14 38	nap				ATL8C3 4564:9 32..13 83	0.63	g30636 91	39	1065	9.9e- 100	(AL022 537) putative protein [Arabidopsis thaliana]
171444	ATU033 384	ATL8C2 2818:1 ..633	nap				ATL8C2 2818:6 8..552	0.62	g51191 3	39	715	3.1e- 59	(D3221 7) cytochrome c oxidase-like

171445	ATU033 385	ATL8S8 886:1. .526	nap						ATL8S8 886:98 ..326	0.62	945862 58	39	577	3.5e- 54	(AL049 640) putati ve protei n [Arabi dopsis thalia na]
171446	ATU033 386	ATL8C3 1217:4 67..1	nap						ATL8C3 1217:4 23..79	0.62	958682 9	39	169	5.3e- 16	HYPOTH ETICAL TRANSC RIPTIO NAL REGULA TOR IN COTF- TETB INTERG ENIC REGION [Bacil lus subtil is]
171447	ATU033 387	ATL8C1 1280:1 345..1 99	nap						ATL8C1 1280:6 58..20 3	0.62	g22643 82	39	551	4.0e- 27	(AC002 354) putati ve tetrac ycline transp

171448	ATU033 388	ATL8C4 5949:1 595..1	nap					ATL8C4 5949:1 461..1 13	0.61	g43357 20.	39	1457	7.8e- 152	orter- like protei n [Arabi dopsis thalia na]
171449	ATU033 389	ATL8C2 1321:6 612..3 921	nap					ATL8C2 1321:6 085..3 921	0.61	g34027 55	39	2328	1.3e- 241	(AC006 248) putati ve revers e transc riptas e Tal- 1 [Arabi dopsis thalia na]
171450	ATU033 390	ATL8C1 2676:1 983..1	nap					ATL8C1 2676:1 906..1 02	0.61	g30470 66	39	142	0.0086	(AL031 187) putati ve transp osable elemen t [Arabi dopsis thalia na]
														(AF058 825) contai ns simila rity

171451	ATU033 391	ATL8C3 8633:7 9..141 1	nap						ATL8C3 8633:4 67..12 06	0.61	g21299 53	39	772	6.7e- 87	to retrov irus- relate d POL polypr oteins [Arabi dopsis thalia na]
171452	ATU033 392	ATL8S2 6050:1 23..50 0	nap						ATL8S2 6050:1 68..41 3	0.61	g12512 0	39	399	1.4e- 29	6- PHOSPH OFRUCT OKINAS E ISOZYM E 1 (PHOSP HOFRUC TOKINA SE-1) (PFK1) [Therm us thermo philus]
171453	ATU033	ATL8C4	nap						ATL8C4	0.60	g31281	39	856	5.7e-	(AC004

393	4079:1 ..589	nap				4079:1 49..52 4	0.60	87	39	355	86	521) putati ve beta- glucos idase [Arabi dopsis thalia na]
171454	ATU033 394	ATL8S1 5003:1 ..562	nap			ATL8S1 5003:2 46..41 5	0.60	g42063 09	39	355	1.6e- 23	(AF049 112) prpol [Zea mays]
171455	ATU033 395	ATL8C3 282:23 07..48 23	nap			ATL8C3 282:23 07..46 84	0.58	g32427 11	39	507	6.2e- 42	(AC003 040) hypoth etical protei n [Arabi dopsis thalia na]
171456	ATU033 396	ATL8S1 3215:5 94..1	nap			ATL8S1 3215:5 13..23	0.57	g34828 81	39	259	2.2e- 21	(U6381 6) unknow n [Pseud omonas aerugi nosa]
171457	ATU033 397	ATL8C1 732:1. .880	nap			ATL8C1 732:16 0..405	0.57	g23927 72	39	199	2.4e- 21	(AC002 534) putati ve chloro plast prephe

171458	ATU033 398	ATL8C3 0946:1 ..1208	nap				ATL8C3 0946:9 2..120 0	0.57	g42636 55	39	1390	1.7e- 75	(AC006 136) putati ve revers e transc riptas e [Arabi dopsis thalia nal]
171459	ATU033 399	ATL8C2 1159:7 09..1	nap				ATL8C2 1159:6 49..42 8	0.57	g39831 03	39	275	5.2e- 31	(AF097 441) phenyl alanin e-tRNA synthe tase [Homo sapien s]
171460	ATU033 400	ATL8S2 1427:1 39..54 1	nap				ATL8S2 1427:1 75..47 4	0.56	g29601 35	39	204	1.8e- 19	(AL022 121) dnaQ [Mycob acteri um tuberc ulosis]
171461	ATU033	ATL8C3	nap				ATL8C3	0.56	g30636	39	674	1.2e-	(AL022)

401	4627:1 ..1204						4627:5 0..120 4	91				70	537) putati ve protei n [Arabi dopsis thalia nal]
171462	ATU033 402	ATL8S3 364:1. .517	nap				ATL8S3 364:46 8..517	0.55	g45859 93	39	223	1.8e- 18	(AC005 287) Simila r to serine /threo nine kinase s [Arabi dopsis thalia nal]
171463	ATU033 403	ATL8S2 718:23 5..765	nap				ATL8S2 718:23 5..732	0.55	g40160 7	39	107	0.0001 2	HYPOTH ETICAL TRANSC RIPTIO NAL REGULA TOR IN ILVO- IBPB INTERG ENIC REGION [Esche richia coli]
171464	ATU033 404	ATL8S2 911:4 29..1	nap				ATL8S2 911:4 29..64	0.55	g28295 12	39	90	2.5e- 08	HYPOTH ETICAL PROTEI

171465	ATU033 405	ATL8C7 954:17 76..27 6	nap						ATL8C7 954:17 69..27 6	0.54	g48742 84	39	819	2.8e- 83	(AC007 212) putati ve mitoch ondria l protei n [Arabi dopsis thalia na]	N CY10D7 .36C []
171466	ATU033 406	ATL8C3 9781:1 ..768	nap						ATL8C3 9781:8 7..683	0.52	g31766 69	39	189	3.3e- 20	(AC004 393) End is cut off. [Arabi dopsis thalia na]	(AC007 212) putati ve mitoch ondria l protei n [Arabi dopsis thalia na]
171467	ATU033 407	ATL8S7 44:501 ..1	nap						ATL8S7 44:458 ..212	0.52	g25650 09	39	718	3.0e- 72	(AC002 983) putati ve zinc finger protei n [Arabi dopsis thalia na]	(AC002 983) putati ve zinc finger protei n [Arabi dopsis thalia na]
171468	ATU033 408	ATL8C3 0471:2	nap						ATL8C3 0471:2	0.52	g38602 46	39	364	2.0e- 35	(AC005 824)	(AC005 824)

171469	ATU033 409	258..8 03	nap					003..1 596	0.51	g12792 15	39	397	3.6e- 36	putative reverse- transcriptase protein [Arabidopsis thaliana]
		ATL8S1 8341:4 98..1						ATL8S1 8341:3 76..63	0.51	g12792 15	39	397	3.6e- 36	(X9712 2) Heme uptake protein A [Bacteroides fragilis]
171470	ATU033 410	ATL8S3 0734:5 21..1	nap					ATL8S3 0734:4 77..13 2	0.51	g43371 74	39	308	5.5e- 28	(AC006 416) Similars to [Arabidopsis thaliana]
171471	ATU033 411	ATL8C3 2308:1 ..1079	nap					ATL8C3 2308:2 61..80 0	0.51	g41159 20	39	1253	5.4e- 115	(AF118 222) similars to the subtilase family of

171472	ATU033 412	ATL8C3 7412:1 ..989	nap					ATL8C3 7412:8 7..648	0.50	g41153 61	39	453			serine protea ses (Pfam: PF0008 2, score; 45.8, E=1.1e -11, n=2) [Arabi dopsis thalia nal
171473	ATU033 413	ATL8S2 0010:1 ..471	nap					ATL8S2 0010:3 77..24 4	0.49	g17064 06	39	184	2.2e- 10		NADP- SPECIF IC GLUTAM ATE DEHYDR OGENAS E (NADP- GDH) [Synec hocyst is sp.]
171474	ATU033	ATL8S2	nap					ATL8S2	0.49	g25818	39	211	3.6e-		(AF003

414	3985:3 99..1					3985:3 27..10 7	17	20	632) PILD [Myxoc occus xanthu s]
171475	ATU033 415	nap				ATL8C3 7393:6 70..18 5	0.49 g45845 39	1400	(AL049 608) extens in- like protei n [Arabi dopsis thalia na]
171476	ATU033 416	nap				ATL8C4 3259:1 785..9 1	0.49 g44328 50, g32692 82	293, 942 2.2e- 26, 2.6e- 89	(AC006 300) hypo thetical protei n [Arabi dopsis thalia na]; (AL030 978) putati ve protei n [Arabi dopsis thalia na]
171477	ATU033 417	nap				ATL8C1 1920:2 259..1	0.48 g32928 29	577 7.9e- 43	(AL031 018) putati

171478	ATU033 418	ATL8C2 7348:1 ..1769	nap					681	0.48	g34618 40	39	1846		ve protei n [Arabi dopsis thalia na]
								ATL8C2 7348:9 82..16 60						(AC005 315) putati ve revers e transc riptas e [Arabi dopsis thalia na]
171479	ATU033 419	ATL8S2 1163:1 ..587	nap					ATL8S2 1163:3 0..485	0.48	g31283 91	39	514	1.8e- 52	(AF028 018) ArfI; arabin osidas e [Cytop haga xylano lytica]
171480	ATU033 420	ATL8C2 2768:2 00..67 2	nap					ATL8C2 2768:2 00..67 2	0.48	g37639 25	39	374	1.4e- 21	(AC004 450) putati ve Af10- protei n [Arabi dopsis

171481	ATU033 421	ATL8C1 9296:2 525..1 996	nap					ATL8C1 9296:2 479..1 996	0.47	g48364 03	39	156	0.12	thalia na] (AF117 723) seed matura tion protei n PM27 [Glyci ne max] (Z9734 2) resist ance gene [Arabi dopsis thalia na]
171482	ATU033 422	ATL8C3 4535:1 721..1	nap					ATL8C3 4535:1 439..3 72	0.46	g22450 43	39	499	8.4e- 51	(AF090 329) cycloh exanon e monoox ygenas e homolo g [Pseud omonas fluore scens]
171483	ATU033 423	ATL8S2 1098:1 ..508	nap					ATL8S2 1098:1 23..47 7	0.45	g36413 40	39	366	3.9e- 34	(AF049 892) unknow n [Oryza
171484	ATU033 424	ATL8S2 2935:1 46..48 9	nap					ATL8S2 2935:4 13..48 0	0.43	g41056 83	39	193	6.6e- 17	

171485	ATU033 425	ATL8S2 9117:1 ..577	nap					ATL8S2 9117:5 4..432	0.43	g11846 84	39	244	1.0e- 15	(U3285 3) MucD [Pseud omonas aerugi nosaj (AC003 028) putati ve SRG1 protei n [Arabi dopsis thalia naj
171486	ATU033 426	ATL8C1 4537:9 39..1	nap					ATL8C1 4537:9 35..17 6	0.42	g33353 72	39	324	6.2e- 32	(AC003 028) putati ve SRG1 protei n [Arabi dopsis thalia naj
171487	ATU033 427	ATL8C1 780:1. .579	nap					ATL8C1 780:18 3..579	0.42	g25012 31	39	440	6.1e- 44	HYPOTH ETICAL 38.1 KD PROTEI N [Coryd alis semper virens]
171488	ATU033 428	ATL8S2 3301:5 53..24 5	nap					ATL8S2 3301:4 62..24 5	0.42	g33228 62	39	185	1.5e- 15	(AE001 232) Tp70 protei n [Trepo nema

171489	ATU033 429	ATL8S2 942:1. .503	nap				ATL8S2 942:67 ..243	0.41	g17070 15	39	264	1.1e- 27	pallid um] (U7872 1) protei n phosph atase 2C isolog [Arabi dopsis thalia na]
171490	ATU033 430	ATL8C1 0135:8 1..549	nap				ATL8C1 0135:8 1..539	0.41	g20726 79	39	404		(Z9512 0) moeZ [Mycob acteri um tuberc ulosis]
171491	ATU033 431	ATL8C3 1370:1 419..1	nap				ATL8C3 1370:1 329..4 86	0.41	g37575 16	39	1135	1.2e- 118	(AC005 167) putati ve TMV resist ance protei n [Arabi dopsis thalia na]
171492	ATU033 432	ATL8C4 055:20 02..11 03	nap				ATL8C4 055:20 02..11 03	0.41	g20886 51	39	338	6.2e- 50	(AF002 109) hypers ensiti vity-

171500	ATU033 440	ATL8C4 3035:4 9..669	nap							g42637 66	39	808	1.4e- 42	n [Arabi dopsis thalia na]; (AC006 217) putati ve Athila retroel ement ORF1 protei n [Arabi dopsis thalia na]
171501	ATU033 441	ATL8C2 4482:6 69..1	nap							g35229 46	39	413	7.5e- 40	(AC004 411) putati ve cytoch rome p450 [Arabi dopsis thalia na]

171502	ATU033 442	ATL8C7 940:15 93..83 0	nap							g21298 35	39	110	7.3e- 06	low molecu lar weight heat shock protei n precu sor (clone Hsp22. 5), endopl asmic reticu lum - soybea n [J]
171503	ATU033 443	ATL8S1 6592:6 98..1	nap							g41382 65	39	225	7.3e- 19	(AJ006 228) Avr9 elicit or respon se protei n [Nicot iana tabacu m]
171504	ATU033 444	ATL8C2 8616:6 30..80 9	nap							g47339 99	39	117	0.0023	(AC007 187) hypo thet ical protei n [Arabi dopsis]

171515	ATU033 455	ATL8C1 68:613 2..684 9	nap						g47739 10	39	293	(AF147 259) No defini tion line found [Arabi dopsis thalia na]
171516	ATU033 456	ATL8C4 6312:2 327..1 494	nap						g43357 53	39	132	(AC006 284) unknow n protei n [Arabi dopsis thalia na]
171517	ATU033 457	ATL8S2 302:1. .464	nap						g29837 58	39	410	(AE000 735) proton /sodiu m- glutam ate sympor t protei n [Aquif ex aeolic us]
171518	ATU033 458	ATL8C3 2810:3 147..1 034	nap						g48952 41	39	414	(AC007 659) hypoth etical

171519	ATU033 459	ATL8S5 168:63 1..1	nap										g45671 98	39	285	4.6e- 19	(AC007 168) putati ve GTP- bindin g protei n [Arabi dopsis thalia na]
171520	ATU033 460	ATL8C5 :5083. .2573	nap										g47739 18	39	481	8.1e- 49	(AF147 259) No defini tion line found [Arabi dopsis thalia na]
171521	ATU033 461	ATL8S1 184:1. .454	nap										g23927 65	39	650	1.9e- 51	(AC002 534) hypoth etical protei n [Arabi dopsis thalia na]

171522	ATU033 462	ATL8C3 5177:6 33..10 61	nap						g22181 41	39	78	8.7e- 06	(AF004 914) E8 protei n homolo g [Lycop ersico n escule ntum]
171523	ATU033 463	ATL8C4 027:42 78..56 67	nap						g47339 87	39	82	0.0001 5	(AC007 209) hypoth etical protei n [Arabi dopsis thalia nal]
171524	ATU033 464	ATL8S3 75:1.. 581	nap						g42626 59	39	128	1.3e- 15	(AF125 971) contai ns simila rlity to glycos yl hydrol ases [Caeno rhabdi tis elegan s]
171525	ATU033 465	ATL8C6 562:1.	nap						g46461 94	39	442	1.8e- 31	(AC007 230)

171531	ATU033 471	ATL8S2 5376:1 ..427	nap																protein, 33K (insertion sequence IS492) - Pseudomonas atlantica [Pseudomonas atlantica]
																			(AC005499) hypothetical protein [Arabidopsis thaliana]
171532	ATU033 472	ATL8C3 9199:1 ..1502	nap																(Y08501) NADH dehydrogenase subunit 4 [Arabidopsis thaliana]
171533	ATU033 473	ATL8C5 0114:3	nap																(AB008490)

171540	ATU033 480	ATL8C1 7722:2 26..42 5	nap							g20650 13	39	317	1.4e- 30	(Y11650) cyclic phospho diester erase [Arabi dopsis thalia na]
171541	ATU033 481	ATL8C1 4318:2 349..9 19	nap							g33193 62	39	1471	1.4e- 152	(AF077408) contai ns simila rity to revers e transc riptas e (Pfam: rvt.hm m, score 19.29) [Arabi dopsis thalia na]
171542	ATU033 482	ATL8C2 3902:4 232..5 523	nap							g47339 78	39	1148	1.7e- 101	(AC007264) hypo thetical protein [Arabi dopsis thalia na]

171547	ATU033 487	ATL8C2 5544:1 ..251	nap							g31842 87	39	114	2.4e- 09	(AC004 136) revers e- transc riptas e-like protei n [Arabi dopsis thalia na]
171548	ATU033 488	ATL8C1 4541:4 58..86 6	nap							g33866 09	39	219	6.1e- 09	(AC004 665) putati ve DNA- bindin g protei n [Arabi dopsis thalia na]
171549	ATU033 489	ATL8S8 777:24 6..483	nap							g22449 80	39	345	5.1e- 32	(Z9734 0) simila rity to myrosi nase- associ ated protei n Brassi ca [Arabi

497	9150:2 145..1 566																		69	52	2) hypothetical protein [Arabidopsis thaliana]
171558	ATU033 498	ATL8C1 770:80 8..507	nap																g44552 31	390	1.3e-43 (AL035523) putative protein [Arabidopsis thaliana]
171559	ATU033 499	ATL8C4 4260:1 ..761	nap																g45586 82	76	0.00096 (AC006586) hypothetical protein [Arabidopsis thaliana]
171560	ATU033 500	ATL8S1 5451:5 29..18 3	nap																g32878 57	253	7.9e-16 3-HYDROXYBUTYRYL-COADEHYDROGENASE (BETA-HYDROXYBUTYRYL-CO-

171563	ATU033 503	ATL8C1 9773:6 96..35 8	nap									g48952 19	39	464	1.1e- 27	prote n F19K23 .19 [Arabi dopsis thalia na]
171564	ATU033 504	ATL8C1 7045:2 314..3 933	nap									g49969 3	39	65	0.995	(L3209 5) cyclop hilin [Vicia faba]
171565	ATU033 505	ATL8S1 4613:1 ..546	nap									g32427 02	39	436	1.1e- 41	(AC003 040) hypoth etical protei n [Arabi dopsis thalia na]
171566	ATU033 506	ATL8S1 0249:1 ..687	nap									g47607 08	39	170	4.1e- 09	(AB012 866) SAE1- S9- protei n

171571	ATU033 511	ATL8C3 9178:1 ..1280	nap								g40380 37	39	532	5.1e- 54	(AC005 936) hypoth etical protei n [Arabi dopsis thalia na]
171572	ATU033 512	ATL8C1 7925:1 098..7 96	nap								g40278 91	39	399		(AF049 350) alpha- expans in precu sor [Nicot iana tabacu m]
171573	ATU033 513	ATL8C2 0636:1 119..3 473	nap								g21601 73	39	198	3.6e- 19	(AC000 132) Simila r to N. tabacu m salt- induci ble protei n (gb U0 8285). [Arabi dopsis thalia na]
171574	ATU033	ATL8C4	nap								g26424	39	782	1.3e-	(AC002

Sample	Time (h)	Temperature (°C)	Pressure (atm)	Flow rate (L/min)	Concentration (g/L)	Viscosity (cP)	Color (L*
1	0	25	1	1	1	1	1
2	1	25	1	1	1	1	1
3	2	25	1	1	1	1	1
4	3	25	1	1	1	1	1
5	4	25	1	1	1	1	1
6	5	25	1	1	1	1	1
7	6	25	1	1	1	1	1
8	7	25	1	1	1	1	1
9	8	25	1	1	1	1	1
10	9	25	1	1	1	1	1
11	10	25	1	1	1	1	1
12	11	25	1	1	1	1	1
13	12	25	1	1	1	1	1
14	13	25	1	1	1	1	1
15	14	25	1	1	1	1	1
16	15	25	1	1	1	1	1
17	16	25	1	1	1	1	1
18	17	25	1	1	1	1	1
19	18	25	1	1	1	1	1
20	19	25	1	1	1	1	1
21	20	25	1	1	1	1	1
22	21	25	1	1	1	1	1
23	22	25	1	1	1	1	1
24	23	25	1	1	1	1	1
25	24	25	1	1	1	1	1
26	25	25	1	1	1	1	1
27	26	25	1	1	1	1	1
28	27	25	1	1	1	1	1
29	28	25	1	1	1	1	1
30	29	25	1	1	1	1	1
31	30	25	1	1	1	1	1
32	31	25	1	1	1	1	1
33	32	25	1	1	1	1	1
34	33	25	1	1	1	1	1
35	34	25	1	1	1	1	1
36	35	25	1	1	1	1	1
37	36	25	1	1	1	1	1
38	37	25	1	1	1	1	1
39	38	25	1	1	1	1	1
40	39	25	1	1	1	1	1
41	40	25	1	1	1	1	1
42	41	25	1	1	1	1	1
43	42	25	1	1	1	1	1
44	43	25	1	1	1	1	1
45	44	25	1	1	1	1	1
46	45	25	1	1	1	1	1
47	46	25	1	1	1	1	1
48	47	25	1	1	1	1	1
49	48	25	1	1	1	1	1
50	49	25	1	1	1	1	1
51	50	25	1	1	1	1	1
52	51	25	1	1	1	1	1
53	52	25	1	1	1	1	1
54	53	25	1	1	1	1	1
55	54	25	1	1	1	1	1
56	55	25	1	1	1	1	1
57	56	25	1	1	1	1	1
58	57	25	1	1	1	1	1
59	58	25	1	1	1	1	1
60	59	25	1	1	1	1	1
61	60	25	1	1	1	1	

514	2571:5 35..1											38				79	391) putati ve indole -3- acetat e beta- glucos yltran sferas e [Arabi dopsis thalia na]
171575	ATU033 515	ATL8C1 2186:1 ..332	nap									g45862 45	39	201	5.1e- 19	(AL049 640) putati ve protei n [Arabi dopsis thalia na]	
171576	ATU033 516	ATL8C2 4131:1 878..1 549	nap									g46783 73	39	229	9.7e- 22	(AL049 656) putati ve protei n [Arabi dopsis thalia na]	
171577	ATU033 517	ATL8S1 3714:1 ..490	nap									g31222 19	38	371	1.3e- 32	HISTID INOL DEHYDR OGENAS	

524	167:1. .629					167:9. .629	0.99		54		63	340) putati ve cytoch rome P450 [Arabi dopsis thalia nal]
171585	ATU033 525	ATL8C4 9912:1 ..1122	nap			ATL8C4 9912:7 6..984	0.99		g48951 83	846	1.6e- 76	(AC007 661) hypoth etical protei n [Arabi dopsis thalia nal]
171586	ATU033 526	ATL8S1 1425:1 ..524	nap			ATL8S1 1425:1 27..50 7	0.99		g25067 12	517	8.5e- 49	HYPOTH ETICAL 51.0 KD PROTEI N IN BARA- SDAC INTERG ENIC REGION [Esche richia coli]
171587	ATU033 527	ATL8S2 824:1. .434	nap			ATL8S2 824:71 ..36	0.99		g28275 43	227	7.4e- 27	(AL021 635) predic ted protei n

171588	ATU033 528	ATL8C2 6881:1 207..1	nap					ATL8C2 6881:1 128..4 89	0.99		g29613 52	38	343	3.0e- 19	[Arabi dopsis thalia na] (AL022 140) putati ve protei n [Arabi dopsis thalia na]
171589	ATU033 529	ATL8S6 554:41 3..1	nap					ATL8S6 554:36 1..31	0.99		g24955 28	38	327		HYPOTH ETICAL 40.4 KD PROTEI N IN SBMA- DDLA INTERG ENIC REGION [Esche richia coli]
171590	ATU033 530	ATL8C1 445:24 ..1327	nap					ATL8C1 445:24 ..1018	0.98		g45672 96	38	197	3.4e- 10	(AC006 918) putati ve Athila retroe lement ORF1 protei n [Arabi dopsis

171591	ATU033 531	ATL8C4 2525:1 ..1973	nap				ATL8C4 2525:5 ..1615	0.98	g47738 94	38	627	2.9e- 53	thalia na] (AF076 243) hypoth etical protein n [Arabi dopsis thalia na]
171592	ATU033 532	ATL8C1 9528:1 ..450	nap				ATL8C1 9528:8 5..311	0.98	g42042 94	38	192	0.058	(AC003 027) lcl pr t_seq No defini tion line found [Arabi dopsis thalia na]
171593	ATU033 533	ATL8S2 9717:1 ..435	nap				ATL8S2 9717:1 2..409	0.97	g10774 4	38	253	1.9e- 22	succin ate dehydr ogenas e (EC 1.3.99 .1) flavop rotein - human (fragm ent) [Homo sapien

171594	ATU033 534	ATL8S4 423:44 8..1	nap			ATL8S4 423:44 8..59	0.97		g44686 92	38	192	9.7e- 14	s] (AL035 591) putati ve transc riptio nal regula tor (lacI family) [Strep tomyce s coelic olor]
171595	ATU033 535	ATL8S2 6342:1 ..430	nap			ATL8S2 6342:2 ..338	0.97		g33782 95	38	234		(AF079 317) unknow n [Sphin gomona s aromat icivor ans]
171596	ATU033 536	ATL8C3 0784:5 98..29 5	nap			ATL8C3 0784:3 90..29 5	0.97		g36680 86	38	156	6.5e- 13	(AC004 667) unknow n protei n [Arabi dopsis thalia na]
171597	ATU033 537	ATL8C1 1994:6	nap			ATL8C1 1994:5	0.96		g31525 78	38	132	1.6e- 05	(AC002 986)

171598	ATU033 538	ATL8S1 3543:4 40..1	nap				62..35 2	0.96	g46462 24	38	281	1.6e- 28	YUP8H1 2R.10 [Arabi dopsis thalia na]
171599	ATU033 539	ATL8C5 071:13 06..1	nap				ATL8S1 3543:1 84..46	0.96	g44552 22	38	809	3.5e- 47	(AC007 295) hypoeth etical protei n [Arabi dopsis thalia na]
171600	ATU033 540	ATL8C2 770:45 ..818	nap				ATL8C5 071:11 11..33 2	0.96	g41917 80	38	364	3.3e- 33	(AL035 440) hypoeth etical protei n [Arabi dopsis thalia na]
171601	ATU033 541	ATL8C4 4780:4	nap				ATL8C2 770:45 ..654	0.95	g30249 91	38	372	2.0e- 32	(AC005 917) putati ve cytoki nin oxidas e [Arabi dopsis thalia na]
							ATL8C4 4780:4						HYPOTH ETICAL

171602	ATU033 542	67..20	ATL8S1 3193:1 05..57 5	nap				04..20	0.95	g26226 01	38	224	1.1e- 15	AMINOT RANSFE RASE YBDL [Esche richia coli]
														(AE000 909) serine /threo nine protei n kinase relate d protei n [Metha nobact erium thermo autotr ophicu m]
171603	ATU033 543	ATL8C2 5867:1 271..1	nap					ATL8C2 5867:9 97..28	0.95	g44902 95	38	81	2.3e- 05	(AL035 678) hypoth etical protei n [Arabi dopsis thalia na]
171604	ATU033 544	ATL8S2 2151:5 32..1	nap					ATL8S2 2151:5 23..8	0.95	g33292 84	38	322	1.4e- 24	(AE001 354) Phosph ogluco

171605	ATU033 545	ATL8C2 5489:3 039..1	nap						ATL8C2 5489:2 857..5 3	0.94	g17056 58	38	286	6.4e- 20	CCAAT- BINDIN G FACTOR (CBF) [Homo sapien s]	mutase [Chlam ydia tracho matris]
171606	ATU033 546	ATL8C3 9741:8 97..40 3	nap						ATL8C3 9741:8 31..40 3	0.94	g45845 46	38	412	2.3e- 42	(AL049 608) putati ve protei n [Arabi dopsis thalia na]	
171607	ATU033 547	ATL8C5 307:18 93..1	nap						ATL8C5 307:18 93..41 4	0.94	g32928 32	38	141	9.3e- 07	(AL031 018) putati ve protei n [Arabi dopsis thalia na]	
171608	ATU033 548	ATL8C2 1436:2 210..1 444	nap						ATL8C2 1436:2 145..1 718	0.94	g46462 26	38	195	2.3e- 10	(AC007 235) hypoth etical protei n [Arabi	

171609	ATU033 549	ATL8C3 0215:5 25..13 23	nap						ATL8C3 0215:5 25..12 39	0.94	g32647 78	38	284	3.0e- 22	(AF072 536) H- protei n promot er bindin g factor -1 [Arabi dopsis thalia nal]
171610	ATU033 550	ATL8C1 7563:2 807..1 959	nap						ATL8C1 7563:2 719..1 959	0.93	g18134 89	38	178	4.4e- 12	(U6431 2) amidas e [Bacil lus firmus J]
171611	ATU033 551	ATL8S2 7664:4 36..1	nap						ATL8S2 7664:4 27..45	0.93	g33782 78	38	163	0.0009 9	(AF079 317) putati ve aromat ic efflux pump membra ne protei n [Sphin gomona

171612	ATU033 552	ATL8C5 946:73 5..255	nap							ATL8C5 946:66 9..255	0.93	g33865 34	38	354		s aromat icivor ans] (AF078 934) marine r transp osase [Glyci ne max]
171613	ATU033 553	ATL8C4 9676:1 407..1	nap							ATL8C4 9676:1 331..4 3	0.93	g27022 84	38	211	1.5e- 25	(AC003 033) Argona ute (AG01) -like protei n [Arabi dopsis thalia na]
171614	ATU033 554	ATL8C1 2203:4 091..4 682	nap							ATL8C1 2203:4 091..4 534	0.93	g39131 92	38	399	6.3e- 72	CYTOCH ROME P450 93A1 [Glyci ne max]
171615	ATU033 555	ATL8C4 4869:1 ..1392	nap							ATL8C4 4869:1 70..13 92	0.92	g40380 57	38	1335	4.3e- 120	(AC005 897) hypoeth etical protei n [Arabi dopsis]

171616	ATU033 556	ATL8C1 8381:1 535..8 9	nap					ATL8C1 8381:1 383..8 9	0.92	g44328 64	38	992	1.1e- 91	thalia na] (AC006 300) hypoth etical protei n [Arabi dopsis thalia na]
171617	ATU033 557	ATL8C2 1029:1 539..1	nap					ATL8C2 1029:1 539..1 54	0.92	g33095 83	38	634	2.5e- 57	(AF073 830) fructo se-6- phosph ate 2- kinase /fruct ose- 2,6- bispho sphata se [Solan um tubero sum]
171618	ATU033 558	ATL8C1 4774:1 ..1598	nap					ATL8C1 4774:4 01..15 68	0.92	g32427 08	38	557	5.6e- 60	(AC003 040) putati ve serine /threo nine protei n kinase [Arabi

171619	ATU033 559	ATL8C4 8744:8 72..1	nap				ATL8C4 8744:8 72..10 9	0.92	g21295 59	38	937	5.5e- 90	dopsis thalia na] cellul ase homolo g OR16pe p - Arabid opsis thalia na [Arabi dopsis thalia na] DIBENZ OTHIOPI HENE DESULF URIZAT ION ENZYME A [Rhodo coccus sp.]
171620	ATU033 560	ATL8S2 0426:5 74..10	nap				ATL8S2 0426:5 28..10	0.92	g17114 67	38	139	2.0e- 13	(U9321 5) unknown protei n [Arabi dopsis thalia na] (AL035 440)
171621	ATU033 561	ATL8C8 440:32 87..24 99	nap				ATL8C8 440:31 88..24 99	0.92	g19463 76	38	159	1.3e- 12	
171622	ATU033 562	ATL8C5 382:20	nap				ATL8C5 382:20	0.92	g44551 93	38	822	8.5e- 65	

171623	ATU033 563	93..32 50	nap					93..30 43	0.91	g27813 48	38	987	2.0e- 59	(AC003 113) F2401. 4 [Arabi dopsis thalia na]	fimbri n-like protei n (ATFIM 1) [Arabi dopsis thalia na]
171624	ATU033 564	ATL8C3 016:37 6..151 7	nap					ATL8C3 016:39 4..144 8	0.90	g28298 68	38	121	5.0e- 15	(AC002 396) Unknown protein [Arabi dopsis thalia na]	(AC002 396) Unknown protein [Arabi dopsis thalia na]
171625	ATU033 565	ATL8C2 2377:1 ..710	nap					ATL8C2 2377:2 68..39 8	0.90	g32490 76	38	554	2.1e- 45	(AC004 473) Simila r to beta glucos idase (bglA) gbIX94 986 from Maniho	(AC004 473) Simila r to beta glucos idase (bglA) gbIX94 986 from Maniho

171626	ATU033 566	ATL8C3 8052:1 3..184 1	nap					ATL8C3 8052:1 3..176 6	0.90		g37575 16	38	1642	1.5e- 159	(AC005 167) putati ve TMV resist ance protei n [Arabi dopsis thalia na].
171627	ATU033 567	ATL8C5 771:1. .1482	nap					ATL8C5 771:59 ..1406	0.88		g21453 58	38	1107		(Y1092 2) HD- Zip protei n [Arabi dopsis thalia na].
171628	ATU033 568	ATL8C2 7317:1 ..1313	nap					ATL8C2 7317:5 2..944	0.88		g20621 65, g22621 62	38, 34	116, 102		(AC001 645) jasmon ate induci ble protei n isololog [Arabi dopsis thalia

171629	ATU033 569	ATL8C3 1544:1 ..755	nap						ATL8C3 1544:5 8..501	0.88	g73034 7	38	126	1.6e- 08	na]; (AC002 329) hypoth etical protei n simila r to A. thalia na protei n F19K23 .19 [Arabi dopsis thalia na]; DNA METHYL TRANSF ERASE PMT1 (SPIM. SPOI) (M.SPO MI) [Schiz osacch aromyc es pombel]
171630	ATU033 570	ATL8C5 767:17 02..1	nap						ATL8C5 767:16 80..8	0.88	g47411 90	38	1603		(AL049 746) ABC- type transp ort-

171631	ATU033 571	ATL8C3 4574:7 27..32 4	nap						ATL8C3 4574:7 20..32 4	0.88	g40911 17	38	279	1.7e- 23	(AF047 428) nuclei c acid bindin g protei n [Oryza sativa]	like protei n [Arabi dopsis thalia na]
171632	ATU033 572	ATL8C3 8232:1 5..658	nap						ATL8C3 8232:4 78..65 5	0.88	g17325 13	38	79	2.6e- 08	(U6274 3) snapdr agon myb protei n 305 homolo g [Arabi dopsis thalia na]	
171633	ATU033 573	ATL8C7 899:19 97..24 99	nap						ATL8C7 899:22 05..20 95	0.88	g45103 48	38	77	0.066	(AC006 921) unknow n protei n [Arabi dopsis thalia na]	

171634	ATU033 574	ATL8C3 2809:1 208..5 6	nap				ATL8C3 2809:1 208..4 41	0.88	g32928 11	38	599	2.3e- 44	na] (AL031 018) hypoth etical protei n [Arabi dopsis thalia na]
171635	ATU033 575	ATL8S2 8784:1 ..655	nap				ATL8S2 8784:2 3..640	0.88	g17032 82	38	339	3.9e- 33	CHLORO PLAST AMINOP EPTIDA SE PRECUR SOR (LEUCI NE AMINOP EPTIDA SE) (LAP) (LEUCY L AMINOP EPTIDA SE) (PROLI NE AMINOP EPTIDA SE) (PROLY L AMINOP EPTIDA SE) [solan

171636	ATU033 576	ATL8C2 9239:1 ..1057	nap					ATL8C2 9239:1 02..84 7	0.87	g47339 86	38	714	3.5e- 59	um tubero sum] (AC007 209) hypoth etical protei n [Arabi dopsis thalia na]
171637	ATU033 577	ATL8C2 8356:1 ..563	nap					ATL8C2 8356:2 0..563	0.87	g19463 66	38	421	1.0e- 36	(U9321 5) unknow n protei n [Arabi dopsis thalia na]
171638	ATU033 578	ATL8C2 2629:1 ..912	nap					ATL8C2 2629:4 8..912	0.87	g41153 58	38	552	2.2e- 23	(AC005 957) putati ve G- beta- repeat contai ning protei n [Arabi dopsis thalia na]
171639	ATU033 579	ATL8S9 090:1. .579	nap					ATL8S9 090:65 ..570	0.86	g24937 39	38	196	2.2e- 17	HYPOTH ETICAL 55.9

171640	ATU033 580	ATL8S1 6034:1 ..227	nap					ATL8S1 6034:5 7..226	0.86		g43357 39	38	281	2.5e- 26	KD PROTEI N IN CSGC- MDOG INTERG ENIC REGION [Esche richia coli]
															(AC006 248) hypoth etical protei n [Arabi dopsis thalia na]
171641	ATU033 581	ATL8C2 6935:7 65..1	nap					ATL8C2 6935:7 53..69	0.86		g38058 54	38	131	1.2e- 09	(AL031 986) putati ve protei n [Arabi dopsis thalia na]
171642	ATU033 582	ATL8C4 4188:1 276..1	nap					ATL8C4 4188:1 212..7 6	0.86		g29245 52	38	322	1.8e- 19	(AL022 018) /predi ction= (metho d:; /predi ction= (metho

171646	ATU033 586	ATL8C1 2844:1 ..859	nap							ATL8C1 2844:9 0..835	0.86	g39534 58	38	593	6.3e- 68	(GLYCI NAMIDE RIBONU CLEOTI DE SYNTHE TASE) (PHOSP HORIBO SYLGly CINAMI DE SYNTHE TASE) [Esche richia coli]
171647	ATU033 587	ATL8C3 9481:5 68..1	nap							ATL8C3 9481:5 68..3	0.86	g42181 50	38	78	0.0017	(AJ132 705) DnaJ2 protei n [Anaba ena variab ilis]
171648	ATU033 588	ATL8C2 7567:1 ..1009	nap							ATL8C2 7567:6 7..862	0.85	g21045 35	38	749		(AF001 308) T10M13 .13 [Arabi dopsis

171649	ATU033 589	ATL8S2 5559:3 94..1	nap				ATL8S2 5559:3 26..13 8	0.85	g17427 06	38	151	1.0e- 14	thalia na] (D9080 7) ORF ID :o316# 19; simila r to [Esche richia coli]
171650	ATU033 590	ATL8C4 481:11 02..1	nap				ATL8C4 481:73 9..66	0.84	g45860 53	38	391	9.1e- 44	(AC007 020) putati ve lacass e [Arabi dopsis thalia na]
171651	ATU033 591	ATL8S4 451:21 ..481	nap				ATL8S4 451:45 ..446	0.84	g58557 6	38	368	2.1e- 35	PROBAB LE AMMONI UM TRANSP ORTER (MEMBR ANE PROTEI N NRGA) [Bacil lus subtil is]
171652	ATU033 592	ATL8S3 34:1.. 540	nap				ATL8S3 34:343 ..216	0.84	g36953 97	38	370	2.1e- 33	(AF096 372) No

171653	ATU033 593	ATL8C3 9038:9 59..10 6	nap				ATL8C3 9038:8 74..10 6	0.84	g30969 22	38	92	0.015	(AL023 094) putati ve protei n [Arabi dopsis thalia na]
171654	ATU033 594	ATL8C4 0312:2 004..1 109	nap				ATL8C4 0312:1 918..1 196	0.84	g23426 87	38	607	1.9e- 28	(AC000 106) Simila r to Beta integr al membra ne protei n (gb U4 3629). EST gb W43 122 comes from this gene. [Arabi dopsis

171655	ATU033 595	ATL8C2 8259:6 83..48	nap				ATL8C2 8259:6 08..28 0	0.83	g29613 56	38	405	7.7e- 42	thalia na] (AL022 140) alcohol dehydr ogenas e like protei n [Arabi dopsis thalia na]
171656	ATU033 596	ATL8C2 4050:1 ..1870	nap				ATL8C2 4050:2 6..178 2	0.83	g43097 48	38	1327	6.0e- 109	(AC006 217) hypoth etical protei n [Arabi dopsis thalia na]
171657	ATU033 597	ATL8C2 4638:2 445..1	nap				ATL8C2 4638:2 445..2 51	0.83	g34260 37	38	2240	7.0e- 187	(AC005 168) putati ve ABC transp orter protei n [Arabi dopsis thalia na]
171658	ATU033 598	ATL8C3 7355:5 69..90	nap				ATL8C3 7355:7 01..88	0.82	g24627 58	38	334		(AC002 292) putati

171662	ATU033 602	ATL8C2 528:1. .561	nap					ATL8C2 528:60 ..502	0.81	g39280 95	38	641	1.5e- 67	(AC005 770) putati ve protei n kinase [Arabi dopsis thalia na]
171663	ATU033 603	ATL8C3 4104:7 58..17 21	nap					ATL8C3 4104:7 89..17 03	0.81	g49144 29	38	600	1.4e- 49	(AL050 351) SEC14- like protei n [Arabi dopsis thalia na]
171664	ATU033 604	ATL8C2 6872:1 389..1	nap					ATL8C2 6872:1 385..2 51	0.80	g47260 79	38	1173	1.4e- 100	(AF143 940) SWI2/S NF2- like protei n [Arabi dopsis thalia na]
171665	ATU033	ATL8C3	nap					ATL8C3	0.80	g22448	38, 36	261,	4.0e-	(Z9733

171666	605	8419:1 465..1	nap				8419:8 86..47	39, g22449 20	203	26, 9.7e- 18	7) hypoth etical protei n [Arabi dopsis thalia na]; (Z9733 9) hypoth etical protei n [Arabi dopsis thalia na]
	ATU033 606	ATL8S2 0710:5 94..1	nap				ATL8S2 0710:2 94..11 6	g45578 17	442	5.8e- 38	3- oxoaci d CoA transf erase precu sor; succin yl- CoA:3- ketoac id-CoA transf erase precu sor [Homo sapien s]
171667	ATU033 607	ATL8C3 1240:6	nap				ATL8C3 1240:4	g45670 95	369	3.6e- 30	(AF129 516)

171668	ATU033 608	ATL8C1 2148:1 ..1751	nap				17..10 9	0.79	g46462 32	38	648	2.4e- 59	(AC007 266) putati ve ligand -gated ion channe l protei n [Arabi dopsis thalia na]
171669	ATU033 609	ATL8C2 2620:4 1..573	nap				ATL8C2 2620:4 1..420	0.79	g10205 7	38	223	1.8e- 20	probab le reduct ase protei n - Leishm ania major []
171670	ATU033 610	ATL8S2 9058:1	nap				ATL8S2 9058:2	0.79	g34514 35	38	202	1.5e- 10	(AL031 350)

171671	ATU033 611	ATL8C4 2060:1 ..2476	nap				2..333	0.78	g23427 24	38	331	4.1e- 25	hypoth etical protei n SC1F2. 03c [Strep tomyce s coelic olor]
171672	ATU033 612	ATL8C1 1875:1 ..1521	nap				ATL8C1 1875:7 60..31 9	0.78	g48369 18	38	1374	5.2e- 121	(AC007 153) 89334 [Arabi dopsis thalia nal]
171673	ATU033 613	ATL8S2 9146:1 ..417	nap				ATL8S2 9146:6 9..363	0.78	g18772 80	38	417	4.3e- 39	(Z9277 0) pntAA [Mycob acteri um tuberc ulosis]
171674	ATU033 614	ATL8C2 733:22 9..164	nap				ATL8C2 733:22 9..155	0.77	g45859 12	38	124	5.9e- 05	(AC006 298) hypoth

171675	ATU033 615	ATL8C3 8536:1 ..668	nap					ATL8C3 8536:1 27..66 8	0.77	g24594 38	38	390	5.7e- 41	etical protei n [Arabi dopsis thalia na]
171676	ATU033 616	ATL8C4 6678:1 447..7 66	nap					ATL8C4 6678:1 310..9 34	0.77	g28275 55	38	354	1.1e- 34	(AL021 635) Transl ation factor EF-1 alpha - like protei n [Arabi dopsis thalia na]
171677	ATU033 617	ATL8C3 6470:5 25..1	nap					ATL8C3 6470:3 96..71	0.77	g22448 24	38	660	1.9e- 67	(Z9733 6) ATP- sulfur ylase [Arabi dopsis thalia na]

171678	ATU033 618	ATL8C1 5847:8 86..1	nap				ATL8C1 5847:8 86..67	0.77	g26739 06	38	681	4.8e- 67	(AC002 561) putati ve DNA polyme rase delta small subuni t [Arabi dopsis thalia na]
171679	ATU033 619	ATL8C4 0810:4 90..1	nap				ATL8C4 0810:1 22..64	0.76	g33865 34	38	409	1.7e- 39	(AF078 934) marine r transp osase [Glyci ne max]
171680	ATU033 620	ATL8C4 72:774 6..169 4	nap				ATL8C4 72:773 8..470 3	0.76	g43253 54	38	500	9.6e- 45	(AF128 395) contai ns simila rity to retrov irus- relate d polypr oteins and to CCHC zinc finger

171681	ATU033 621	ATL8C2 4041:1 374..1	nap						ATL8C2 4041:1 363..1 50	0.76	g45394 69	38	785	5.0e- 46	protein (Pfam: PF00098, Score= 16.3, E=0.051, E=11) [Arabi dopsis thalia na]
171682	ATU033 622	ATL8C1 6053:3 89..1	nap						ATL8C1 6053:3 23..19 1	0.76	g47139 50	38	240	2.1e- 22	(AL049 500) putati ve protei n [Arabi dopsis thalia na]
171683	ATU033 623	ATL8S1 5685:5 39..1	nap						ATL8S1 5685:4 41..22	0.76	g15846 29	38	181	1.3e- 17	(AC007 293) hypoth etical protei n [Arabi dopsis thalia na]
171684	ATU033	ATL8C2	nap						ATL8C2	0.76	g27608	38, 36	338,	8.5e-	rfbM gene [Esche richia coli] (AC003

624	3881:2 008..3 267				3881:2 008..3 254	34, g26513 10	202	13, 4.6e- 05	105) putati ve nitrat e transp orter [Arabi dopsis thalia nal; (AC002 336) putati ve PTR2-B peptid e transp orter [Arabi dopsis thalia nal]
171685	ATU033 625	ATL8S1 2692:1 ..514	nap		ATL8S1 2692:9 7..488	g25115 35	751	3.2e- 74	(AF008 122) alpha- tubuli n 3 [Eleus ine indica]
171686	ATU033 626	ATL8S2 5398:4 78..1	nap		ATL8S2 5398:4 28..65	g25072 31	259	4.5e- 24	SURVIV AL PROTEI N SURA PRECUR SOR (PEPTI

171687	ATU033 627	ATL8C1 7860:1 544..1	nap					ATL8C1 7860:1 486..2 2	0.75	g40068 33	38	1648			DYL- PROLYL CIS- TRANS ISOMER ASE SURA) (PPIAS E) (ROTAM ASE C) [Esche richia colij]
171688	ATU033 628	ATL8C4 1286:1 ..554	nap					ATL8C4 1286:3 45..45 0	0.75	g45858 72	38	199	3.9e- 14		(AC005 850) Hypoth etical protei n [Arabi dopsis thalia nal]
171689	ATU033 629	ATL8S1 5788:6 57..1	nap					ATL8S1 5788:3 74..78	0.75	g48369 37	38	951	1.9e- 97		(AC006 085) Hypoth

171690	ATU033 630	ATL8C3 3079:1 ..643	nap					ATL8C3 3079:1 69..55 6	0.74	g21333 15	38	326	2.2e- 34	etical protei n [Arabi dopsis thalia na]
171691	ATU033 631	ATL8C2 5160:1 413..1	nap					ATL8C2 5160:1 329..2 40	0.74	g31579 33	38	1408	1.7e- 81	(AC002 131) Contai ns simila rity to box helica ses gb U29 097 from C. elegan s and to the ENBP1 gene produc t gb X95 995

171692	ATU033 632	ATL8C8 309:1. .1187	nap				ATL8C8 309:31 6..922	0.74	g44327 94	38	1102	1.8e- 119	from Vicia sativa . [Arabi dopsis thalia na]
171693	ATU033 633	ATL8S1 4555:5 13..1	nap				ATL8S1 4555:3 60..90	0.73	g40564 18	38	209	7.0e- 22	(AC006 437) putati ve Tnp2 Tam1 transp oson protei n [Arabi dopsis thalia na]
171694	ATU033 634	ATL8C3 3963:1 ..5854	nap				ATL8C3 3963:1 23..24 75, ATL8C3 3963:2 811..3 449	0.72, 0.91	g43253 74	38	296		(AC005 322) T7A14. 5 [Arabi dopsis thalia na]
													(AF128 396) No defini tion line found [Arabi dopsis thalia

171695	ATU033 635	ATL8C3 0001:1 ..928	nap				ATL8C3 0001:3 71..80 5	0.72	g31933 21	38	289	2.8e- 31	nal (AF069 299) No defini tion line found [Arabi dopsis thalia na]
171696	ATU033 636	ATL8S6 978:48 2..1	nap				ATL8S6 978:47 6..33	0.71	g45392 02	38	510		(AL049 497) hypoth etical protei n [Strep tomyce s coelic olor]
171697	ATU033 637	ATL8S2 0675:1 38..47 7	nap				ATL8S2 0675:1 38..46 3	0.71	g24072 15	38	161	3.0e- 14	(AF017 421) putati ve heat shock protei n HtpX [Strep tococc us gordon ii]
171698	ATU033 638	ATL8S2 0109:5 78..1	nap				ATL8S2 0109:4 33..87	0.70	g34027 03	38	506	5.7e- 49	(AC004 261) hypoth etical

171699	ATU033 639	ATL8C6 528:1. .666	nap					ATL8C6 528:1. .273	0.70	g45389 44	38	230	5.1e- 19	protein [Arabi dopsis thalia na] (AL049 483) putati ve transc riptio n factor [Arabi dopsis thalia na]
171700	ATU033 640	ATL8C2 0768:1 ..1260	nap					ATL8C2 0768:1 6..878	0.70	g32427 83	38	1260	1.9e- 120	(AF055 354) respir atory burst oxidase protein B [Arabi dopsis thalia na]
171701	ATU033 641	ATL8C4 4865:1 06..15 58	nap					ATL8C4 4865:1 06..13 51	0.69	g23702 53	38	183	1.1e- 16	(Y1327 3) putati ve protein kinase [Lycop ersico

171702	ATU033 642	ATL8C2 9557:1 ..1738	nap				ATL8C2 9557:2 6..173 8	0.69	g36953 87	38	839	1.5e- 62	(AF096 371) contai ns simila rity to replic ation protei n Al [Arabi dopsis thalia na]
171703	ATU033 643	ATL8S2 7492:5 48..1	nap				ATL8S2 7492:4 81..8	0.69	g33233 48	38	347	6.9e- 35	(AE001 269) glu- tRNA amidot ransfe rase, subuni t B (gatB) [Trepo nema pallid um]
171704	ATU033 644	ATL8C1 3529:2 395..1	nap				ATL8C1 3529:2 174..1 408	0.69	g36873 89	38	231	2.4e- 16	(Y1612 4) putati ve cullin protei n [Lycop

171705	ATU033 645	ATL8C4 0235:1 ..434	nap					ATL8C4 0235:1 91..43 4	0.69	g30471 18	38	202	9.4e- 17	ersico n escule ntum] (AF058 919) No defini tion line found [Arabi dopsis thalia na]
171706	ATU033 646	ATL8C1 3576:8 42..1	nap					ATL8C1 3576:7 20..14	0.68	g42042 78	38	675	1.1e- 57	(AC004 146) putati ve Cytoch rome P450 protei n [Arabi dopsis thalia na]
171707	ATU033 647	ATL8C1 3772:1 594..3 15	nap					ATL8C1 3772:1 145..7 64	0.68	g34618 49	38	688	5.5e- 72	(AC005 315) putati ve cytoch rome P450 [Arabi dopsis thalia na]
171708	ATU033	ATL8C4	nap					ATL8C4	0.66	g25823	38	185	4.3e-	(AF018

	648	6476:1 601..6 94								6476:1 532..7 17	0.66		51				11	639) unknown n [Dicty osteli um discoi deum]
171709	ATU033 649	ATL8C1 8213:1 068..1	nap							ATL8C1 8213:1 058..3 4	0.66		g33553 08	38	670		2.3e- 68	(AJ009 695) wall- associ ated kinase 4 [Arabi dopsis thalia na]
171710	ATU033 650	ATL8S5 232:56 9..86	nap							ATL8S5 232:49 6..110	0.66		g32422 51	38	455		9.5e- 40	(Z9561 7) hypoth etical protei n Rv1666 C [Mycob acteri um tuberc ulosis J]
171711	ATU033 651	ATL8C7 656:35 1..538	nap							ATL8C7 656:35 1..507	0.66		g25296 73	38	226		2.7e- 20	(AC002 535) hypoth etical protei n [Arabi

171712	ATU033 652	ATL8C2 115:17 44..1	nap				ATL8C2 115:12 56..13	0.65	g45824 47	38	2368	3.7e- 237	dopsis thalia na] (AC007 071) putati ve revers e transc riptas e [Arabi dopsis thalia na]
171713	ATU033 653	ATL8S2 1971:5 38..57	nap				ATL8S2 1971:4 06..57	0.64	g25013 64	38	136	2.3e- 10	O- ANTIGE N EXPORT SYSTEM PERMEA SE PROTEI N RFBD [Yersi nia entero coliti ca]
171714	ATU033 654	ATL8C1 476:13 88..1	nap				ATL8C1 476:13 81..54	0.64	g37460 69	38	1620	2.6e- 120	(AC005 311) putati ve revers e transc riptas e [Arabi

171715	ATU033 655	ATL8C2 295:15 65..1	nap					ATL8C2 295:15 14..10 98	0.64	946789 19	38	931	3.0e- 99	dopsis thalia nal (AL049 711) sulfat e transp orter (ATST1) [Arabi dopsis thalia nal]
171716	ATU033 656	ATL8C1 7126:1 314..1	nap					ATL8C1 7126:1 177..1 03	0.64	939140 07	38	1028	5.5e- 114	MITOCH ONDRIA L LON PROTEA SE HOMOLO G 2 PRECUR SOR [Arabi dopsis thalia nal]
171717	ATU033 657	ATL8C4 8086:1 ..1518	nap					ATL8C4 8086:1 68..15 18	0.64	932490 82	38	612	1.9e- 123	(AC004 473) Contai ns simila rity to gb X92 204 NAM gene produc

171718	ATU033 658	ATL8C3 2935:1 202..1 593	nap					ATL8C3 2935:1 202..1 532	0.64	g41159 41	38	487	1.1e- 45	t from Petuni a hybrid a. [Arabi dopsis thalia na]
171719	ATU033 659	ATL8S7 368:90 ..513	nap					ATL8S7 368:90 ..337	0.63	g13635 28	38	487	3.2e- 46	gag protei n - maize [Zea mays]

171720	ATU033 660	ATL8S1 8795:7 33..1	nap			ATL8S1 8795:7 19..44	0.62	g11745 48	38	844	1.0e- 83	THREON YL- TRNA SYNTH E TASE (THREO NINE-- TRNA LIGASE) (THRRS) [Haemo philus influe nzae Rd]
171721	ATU033 661	ATL8C1 3554:6 47..1	nap			ATL8C1 3554:5 42..18 1	0.62	g48742 73	38	494	2.1e- 53	(AC007 354) Simila r to []
171722	ATU033 662	ATL8C2 738:15 56..1	nap			ATL8C2 738:14 56..84 4	0.62	g32490 62	38	851	3.3e- 87	(AC004 473) Simila r to jasmon ate induci ble protei n gb Y11 483 from Brassi ca napus. [Arabi dopsis

171723	ATU033 663	ATL8S4 643:1. .426	nap					ATL8S4 643:45 ..426	0.62	g48952 19	38	89	0.40	(AC007 660) hypoth etical protei n [Arabi dopsis thalia na]
171724	ATU033 664	ATL8S1 1444:5 0..592	nap					ATL8S1 1444:5 0..571	0.61	g19290 66	38	97	0.40	(Z9377 7) hypoth etical protei n RV1192 [Mycob acteri um tuberc ulosis]
171725	ATU033 665	ATL8C1 3577:1 ..1478	nap					ATL8C1 3577:3 05..13 61	0.61	g32876 92	38	660	1.9e- 58	(AC003 979) Simila r to tRNA adenyl yltran sferas e gb U15 930 from Lupinu s albus.

171726	ATU033 666	ATL8C8 504:12 67..25 1	nap					ATL8C8 504:94 5..390	0.61	g35401 88	38	512	1.9e- 47	(AC004 122) Hypoth etical protei n [Arabi dopsis thalia na]
171727	ATU033 667	ATL8C2 2024:5 69..23	nap					ATL8C2 2024:4 77..23	0.61	g34829 13	38	530	6.9e- 40	(AC003 970) Simila r to MtN21, [Arabi dopsis thalia na]
171728	ATU033 668	ATL8C4 2927:1 ..1496	nap					ATL8C4 2927:8 9..102 0	0.61	g42063 06	38	2291	2.1e- 232	(AF049 110) prpol [Zea mays]
171729	ATU033 669	ATL8C1 42:289 0..796	nap					ATL8C1 42:289 0..177 9	0.61	g45899 67	38	510		(AC007 169) hypoth etical protei

171730	ATU033 670	ATL8C6 633:1. .1329	nap						ATL8C6 633:27 3..132 9	0.59	g24594 16	38	79	0.0014	n [Arabi dopsis thalia na] (AC002 332) unknow n protei n [Arabi dopsis thalia na]
171731	ATU033 671	ATL8C1 6934:1 ..2668	nap						ATL8C1 6934:8 9..251 6	0.59	g45443 72	38	923	1.1e- 88	(AC006 920) putati ve revers e transc riptas e [Arabi dopsis thalia na]
171732	ATU033 672	ATL8C1 2796:1 476..1	nap						ATL8C1 2796:9 80..59	0.59	g45389 01	38	986	1.9e- 78	(AL049 482) RNA- direct ed DNA polyme rase- like protei n [Arabi dopsis

171733	ATU033 673	ATL8S3 0323:1 30..55 0	nap					ATL8S3 0323:1 30..54 4	0.59	g32202 67	38	449	1.9e- 43	thalia nal (AF070 715) alanin e dehydr ogenas e [Shewa nella sp. Ac10]
171734	ATU033 674	ATL8C5 936:37 69..40 8	nap					ATL8C5 936:35 51..20 28	0.58	g49268 18	38	176		(AC004 135) T17H7. 3 [Arabi dopsis thalia nal]
171735	ATU033 675	ATL8C1 188:13 19..1	nap					ATL8C1 188:12 74..77	0.58	g45570 78	38	842	3.6e- 75	(AC007 045) putati ve Tall-1 pol polypr otein, 5, partia l [Arabi dopsis thalia nal]
171736	ATU033 676	ATL8S3 0086:1 ..367	nap					ATL8S3 0086:5 1..157	0.58	g27361 47	38	250	9.6e- 13	(AF021 804) fatty acid

171737	ATU033 677	ATL8C2 4829:1 ..937	nap					ATL8C2 4829:2 82..93 7	0.58	946783 27	38	834	1.1e- 82	(Al049 658) putati ve cyclic nucleo tide- gated channe l [Arabi dopsis thalia nal]
171738	ATU033 678	ATL8S8 602:51 4..1	nap					ATL8S8 602:51 4..53	0.58	919232 41	38	129	0.081	(U8225 3) site- specif ic recomb inase [Neiss eria gonorr hoeae]
171739	ATU033 679	ATL8C4 6025:1 ..781	nap					ATL8C4 6025:2 05..72 8	0.58	920886 51	38	158	7.0e- 25	(AF002 109) hypers ensiti vity- relate d gene 201

171740	ATU033 680	ATL8C1 5147:1 ..624	nap					ATL8C1 5147:1 20...59 3	0.57	g44907 22	38	620	1.0e- 63	(AL035 709) 1- aminoc yclopr opane- 1- carbox ylate syntha se [Arabi dopsis thalia na]
171741	ATU033 681	ATL8C5 0251:9 94..44 32	nap					ATL8C5 0251:9 94..41 60	0.57	g46999 44	38	415	1.0e- 34	(AC007 166) hypoth etical protei n [Arabi dopsis thalia na]
171742	ATU033 682	ATL8C2 1363:1 547..1	nap					ATL8C2 1363:1 344..2 53	0.57	g38105 96	38	238	1.7e- 20	(AC005 398) revers e- transc riptas e-like protei n [Arabi

171743	ATU033 683	ATL8C1 9924:2 38..15 81	nap					ATL8C1 9924:2 93..15 10	0.57	g39534 79	38	1633	1.7e- 141	dopsis thalia na] (AC002 328) F2202. 24 [Arabi dopsis thalia na]
171744	ATU033 684	ATL8S1 0527:1 ..529	nap					ATL8S1 0527:6 9..482	0.56	g18813 26	38	161	5.3e- 09	(AB001 488) SIMILA R TO HYPOTH ETICAL TRANSC RIPTIO NAL REGULA TORS. [Bacil lus subtil is]
171745	ATU033 685	ATL8C1 1375:1 ..823	nap					ATL8C1 1375:6 43..50 6	0.56	g45388 96	38	702	7.4e- 65	(AL049 482) putati ve protei n [Arabi dopsis thalia na]
171746	ATU033 686	ATL8S7 371:1. ..511	nap					ATL8S7 371:62 ..177	0.55	g33778 32	38	124	1.2e- 07	(AF075 598) No defini

171747	ATU033 687	ATL8S2 5184:1 ..289	nap					ATL8S2 5184:6 5..289	0.55	g33556 66	38	185	7.4e- 17	(X9335 8) ORFx [Sinor hizobi um melilo ti]
171748	ATU033 688	ATL8C4 4507:1 5..758	nap					ATL8C4 4507:1 5..654	0.55	g45394 49	38	594	6.4e- 58	(AL049 500) putati ve protei n [Arabi dopsis thalia na]
171749	ATU033 689	ATL8C3 7748:1 ..2231	nap					ATL8C3 7748:6 4..215 3	0.54	g36872 26	38	1475	2.8e- 102	(AC005 169) hypoth etical protei n [Arabi dopsis thalia na]
171750	ATU033 690	ATL8C6 515:59 8..1	nap					ATL8C6 515:59 8..321	0.54	g23471 98	38	445	7.8e- 42	(AC002 338) hypoth etical protei

171751	ATU033 691	ATL8C4 0585:1 ..2597	nap					ATL8C4 0585:7 2..259 7	0.54	g46801 83	38	391	1.6e- 28	(AF111 709) gag- pol protei n [Oryza sativa subsp. indica]
171752	ATU033 692	ATL8C4 569:79 6..474	nap					ATL8C4 569:67 5..587	0.52	g44327 96	38	233	5.5e- 15	(AC006 437) putati ve vsf-1 protei n [Arabi dopsis thalia nal
171753	ATU033 693	ATL8C1 9256:1 538..4 4	nap					ATL8C1 9256:1 148..4 4	0.51	g22449 78	38	115	1.8e- 10	(Z9734 0) simila rity to splici ng factor SF3a 120K chain - human

171754	ATU033 694	ATL8C1 0309:2 010..2 911	nap							ATL8C1 0309:2 010..2 719	0.51	g32427 13	38	687	[Arabi dopsis thalia na]
171755	ATU033 695	ATL8S2 8887:8 8..624	nap							ATL8S2 8887:8 8..563	0.51	g67154	38	238	CDPdia cylgly cerol- glycer ol-3- phosph ate 3- phosph atidyl transf erase (EC 2.7.8. 5) - Escher ichia coli []
171756	ATU033 696	ATL8C6 83:1.. 540	nap							ATL8C6 83:46.. .540	0.49	g21601 36	38	488	(AC000 375) F19K23 .4 gene produc t

171757	ATU033 697	ATL8S4 892:55 4..1	nap				ATL8S4 892:49 1..137	0.49	g24153 95	38	134	8.2e- 11	[Arabi dopsis thalia nal] (AF015 775) protei nase [Bacil lus subtil is]
171758	ATU033 698	ATL8S1 3098:4 79..1	nap				ATL8S1 3098:3 08..13 2	0.48	g45811 32	38	597	1.0e- 52	(AC005 825) hypoth etical protei n [Arabi dopsis thalia nal]
171759	ATU033 699	ATL8C1 2202:1 ..1988	nap				ATL8C1 2202:7 5..182 6	0.48	g45220 05	38	1549	5.9e- 143	(AC007 069) putati ve revers e transc riptas e [Arabi dopsis thalia nal]
171760	ATU033 700	ATL8C2 3572:7 52..1	nap				ATL8C2 3572:7 52..10 7	0.47	g32362 53	38	464	1.1e- 50	(AC004 684) recept or- like

171761	ATU033 701	ATL8C1 818:70 4..227	nap				ATL8C1 818:57 2..425	0.47	g33341 44	38	168	8.2e- 20	protein kinase [Arabi dopsis thalia na]
171762	ATU033 702	ATL8C4 9904:2 116..1 577	nap				ATL8C4 9904:2 115..1 577	0.47	g28092 51	38	567	3.0e- 59	(AC002 560) F21B7. 20 [Arabi dopsis thalia na]
171763	ATU033 703	ATL8S1 9066:4 46..15	nap				ATL8S1 9066:2 42..41	0.46	g39909 0	38	293	4.1e- 27	TYROSI NE AMINOT RANSFE RASE (L- TYROSI NE:2- OXOGLU TARATE AMINOT RANSFE RASE) (TAT) [Rhizo bium melilo

171764	ATU033 704	ATL8C4 9325:2 633..2 118	nap				ATL8C4 9325:2 567..2 149	0.45	g45585 58	38	487	4.6e- 49	ti] (AC007 138) putati ve polyga lactur onidas e [Arabi dopsis thalia na]
171765	ATU033 705	ATL8C9 072:23 52..1	nap				ATL8C9 072:22 11..40 8	0.45	g45443 72	38	1609		(AC006 920) putati ve revers e transc riptas e [Arabi dopsis thalia na]
171766	ATU033 706	ATL8S1 7364:3 45..1	nap				ATL8S1 7364:3 09..28	0.45	g24965 46	38	418	3.0e- 34	HYPOTH ETICAL 34.9 KD PROTEI N CY1A11 .29C [Mycob acteri um tuberc ulosis]

171767	ATU033 707	ATL8S1 002:1. .433	nap				ATL8S1 002:82 ..433	0.44	g33778 53	38	454	4.1e- 31	(AF076 274) No defini tion line found [Arabi dopsis thalia na]
171768	ATU033 708	ATL8C1 1940:2 45..10 62	nap				ATL8C1 1940:2 45..10 28	0.44	g45593 33	38	150	6.8e- 08	(AC007 087) unknow n protei n [Arabi dopsis thalia na]
171769	ATU033 709	ATL8C1 0315:1 506..1	nap				ATL8C1 0315:1 278..1 2	0.43	g21941 36	38	1988		(AC002 062) Strong simila rity to Zea mays retrot ranspo son Hopsco tch polypr otein (gb U1 2626). [Arabi dopsis thalia

171770	ATU033 710	ATL8S7 48:237 ..582	nap				ATL8S7 48:237 ..492	0.43	g39867 50	38	500	2.5e- 47	na] (AF107 464) serine /threo nine protei n phosph atase type 2A [Hevea brasili ensis]
171771	ATU033 711	ATL8C4 2932:1 ..394	nap				ATL8C4 2932:1 74..39 4	0.43	g45811 24	38	268	2.4e- 23	(AC005 825) hypoth etical protei n [Arabi dopsis thalia na]
171772	ATU033 712	ATL8C3 9561:1 431..1	nap				ATL8C3 9561:9 60..78 4	0.42	g29807 79	38	373	1.4e- 36	(AL022 198) putati ve protei n [Arabi dopsis thalia na]
171773	ATU033 713	ATL8C4 4522:4 881..4 097	nap				ATL8C4 4522:4 638..4 097	0.42	g42621 50	38	856	1.5e- 82	(AC005 275) hypoth etical

171774	ATU033 714	ATL8C4 815:1. .2930	nap					ATL8C4 815:11 ..2890	0.41	g17115 10	38	172	9.7e- 14	SIGNAL RECOGN ITION PARTIC LE 54 KD PROTEI N 2 (SRP54) [Arabi dopsis thalia na]
171775	ATU033 715	ATL8C4 800:29 88..24 6	nap					ATL8C4 800:26 35..24 6	0.41	g43888 30	38	1095	3.4e- 116	(AC006 528) hypoth etical protei n [Arabi dopsis thalia na]
171776	ATU033 716	ATL8C2 899:79 4..1	nap					ATL8C2 899:68 1..80	0.40	g22448 51	38	444	1.0e- 47	(Z9733 7) amine oxidas e [Arabi dopsis thalia na]
171777	ATU033	ATL8C1	nap							g31842	38	124	0.0001	(U8213

171778	717	0815:1 ..443	nap						58	38	175	4	0) tumor suscep tibili ty protei n [Homo sapien s]
	ATU033 718	ATL8C2 8608:1 ..398							g31526 21	38	175	4.1e- 19	(AC004 482) cold acclim ation protei n WCOR41 3-like [Arabi dopsis thalia na]
171779	ATU033 719	ATL8C2 9215:1 ..495	nap						g45845 45	38	273	5.8e- 30	(AL049 608) putati ve protei n [Arabi dopsis thalia na]
171780	ATU033 720	ATL8C2 3833:6 04..1	nap						g32506 76	38	223	5.5e- 26	(AL024 486) putati ve protei n [Arabi

171781	ATU033 721	ATL8S6 089:1. .412	nap										g30470 67	38	199	1.9e- 16	dopsis thalia na]
																	(AF058 825) r to Arabid opsis thalia na retrot ranspo son Athila (GB:X8 1801) [Arabi dopsis thalia na]
171782	ATU033 722	ATL8C2 9745:2 66..57 3	nap										g45220 07	38	218	1.5e- 14	(AC007 069) unknow n protei n [Arabi dopsis thalia na]
171783	ATU033 723	ATL8S2 7620:1 ..334	nap										g24932 40	38	100	0.98	HYPOTH ETICAL 29.3 KD PROTEI N (ORF92) [Orgyl

171788	ATU033 728	..895	ATL8C3 8873:6 10..18 8	nap									g32585 76	38	352	2.1e- 39	(U8995 9) Unknown protein [Arabi dopsis thalia nal]	putati ve serine carbox ypepti dase I [Arabi dopsis thalia nal]
171789	ATU033 729		ATL8C4 7137:1 ..1203	nap									g34618 27	38	134	0.23	(AC004 138) putati ve diseas e resist ance protei n [Arabi dopsis thalia nal]	putati ve diseas e resist ance protei n [Arabi dopsis thalia nal]
171790	ATU033 730		ATL8S1 9499:1 40..1	nap									g77341 4	38	98	1.4e- 07	(U2375 1) beta galact osidas e	(U2375 1) beta galact osidas e

171791	ATU033 731	ATL8C4 6975:1 ..1004	nap							g45393 94	38	664	2.0e- 64	[Cloni ng vector pBBR1M CS-5] (AL035 526) putati ve protei n [Arabi dopsis thalia na]
171792	ATU033 732	ATL8S1 7689:1 ..563	nap							g45443 74	38	525	5.9e- 52	(AC006 920) unknow n protei n [Arabi dopsis thalia na]
171793	ATU033 733	ATL8C4 5258:1 ..491	nap							g32692 85	38	407	3.9e- 36	(AL030 978) hypo thetical protei n [Arabi dopsis thalia na]
171794	ATU033 734	ATL8C9 286:1. ..586	nap							g38691 90	38	878		(AB005 746) inorga nic phosph

[illegible]

171805	ATU033 745	ATL8S3 753:1. .537	nap								g39939 1	38	541	1.4e- 43	DIHYDR OLIPOA MIDE DEHYDR OGENAS E 3 (LPD- 3) [Pseud omonas putida]	na. [Arabi dopsis thalia na]
171806	ATU033 746	ATL8C4 9710:9 29..1	nap								g26320 19	38	97	1.3e- 09	(AJ002 571) Ykfb [Bacil lus subtil is]	
171807	ATU033 747	ATL8C4 7398:2 87..1	nap								g42048 04	38	81	0.024	(U5252 0) cyclin [Pisum sativu m]	
171808	ATU033 748	ATL8C6 447:1. .180	nap								g41159 32	38	101	0.33	(AF118 223) No defini tion line found [Arabi dopsis thalia	

171809	ATU033 749	ATL8C2 0216:1 160..1 97	nap								g22448 87	38	1085	7.7e- 84	(Z9733 8) hypoth etical protei n [Arabi dopsis thalia na]
171810	ATU033 750	ATL8C4 7051:1 637..1 375	nap								g33866 14	38	176	0.0002 6	(AC004 665) putati ve transc riptio n factor SF3 [Arabi dopsis thalia na]
171811	ATU033 751	ATL8C7 359:33 15..26 74	nap								g44544 50	38	392	1.1e- 37	(AC006 234) putati ve noduli n protei n [Arabi dopsis thalia na]
171812	ATU033 752	ATL8C3 6127:7 01..1	nap								g21601 73	38	316	1.0e- 28	(AC000 132) Simila r to

171813	ATU033 753	ATL8C3 8072:6 03..1	nap									g44540 15	38	225	6.7e- 18	(AL035 396) putati ve protei n [Arabi dopsis thalia na]	N. tabacu m salt- induci ble protei n (gb U0 8285). [Arabi dopsis thalia na]
171814	ATU033 754	ATL8C2 634:10 43..40 3	nap									g45672 96	38	630	8.5e- 47	(AC006 918) putati ve Athila retroee lement ORF1 protei n [Arabi dopsis thalia na]	(AC006 918) putati ve Athila retroee lement ORF1 protei n [Arabi dopsis thalia na]
171815	ATU033 755	ATL8S1 1004:2	nap									g31767 24	38	119	3.0e- 08	(AC002 392)	(AC002 392)

[illegible]

171817	ATU033 757	ATL8C2 6308:1 121..1	nap								g44907 15	38	1076	1.2e- 108	is methan olical] (AL035 680) putati ve protei n [Arabi dopsis thalia na]
171818	ATU033 758	ATL8C4 9763:1 ..301	nap								g48369 43	38	250	4.4e- 15	(AC006 085) Hypoth etical protei n [Arabi dopsis thalia na]
171819	ATU033 759	ATL8C2 5345:3 556..1	nap								g42635 43	38	1246	7.4e- 130	(AC006 250) putati ve Athila retroeo lement ORF1 protei n [Arabi dopsis thalia na]
171820	ATU033 760	ATL8C3 1832:1 813..8	nap								g45824 86	38	1484	7.7e- 139	(AL021 768) putati

171827	ATU033 767	ATL8C3 1855:1 329..1 088	nap										g31842 87	38	379	1.5e- 35	(AC004 136) e- transc riptions e-like protein [Arabi dopsis thalia na]
171828	ATU033 768	ATL8C2 1287:2 648..4 575	nap										g37859 84	38	1413	1.1e- 150	(AC005 560) putati ve revers e transc riptions e [Arabi dopsis thalia na]
171829	ATU033 769	ATL8C2 0153:1 ..825	nap										g17070 07	38	453		(U7872 1) hypoth etical protein

171830	ATU033 770	ATL8C9 375:55 6..139 9	nap										g39285 43	38	683	1.3e- 69	[Arabi dopsis thalia na] (AB016 819) UDP- glucos e glucos yltran sferas e [Arabi dopsis thalia na]
171831	ATU033 771	ATL8S1 9721:3 71..19 2	nap										g30213 44	38	148	2.3e- 05	(AJ004 959) hypoth etical protei n [Cicer arieti num]
171832	ATU033 772	ATL8S7 691:57 8..208	nap										g72970 7	38	290	2.9e- 27	HFLC PROTEI N [Vibri o paraha emolyt icus]
171833	ATU033 773	ATL8C1 4485:5 58..97 5	nap										g32128 60	38	252	5.0e- 16	(AC004 005) hypoth etical protei n

171834	ATU033 774	ATL8C2 5401:9 18..58 4	nap										g27393 87	38	105	1.7e- 10	[Arabi dopsis thalia na] (AC002 505) hypoth etical protei n [Arabi dopsis thalia na]
171835	ATU033 775	ATL8C2 0148:1 ..372	nap										g45875 59	38	492		(AC006 577) Contai ns simila rity to gb Y13 722 Hap2c Transc riptio n factor from Arabid opsis thalia na. []
171836	ATU033 776	ATL8C2 091:1. .474	nap										g47739 07	38	330	1.2e- 31	(AF074 021) hypoth etical protei n [Arabi

171837	ATU033 777	ATL8C3 3681:4 05..11 20	nap									g40637 41	38	444	2.0e- 44	dopsis thalia nal (AC005 851) putati ve Na/H antipo rter [Arabi dopsis thalia nal]
171838	ATU033 778	ATL8C1 2984:2 85..1	nap									g26497 78	38	215	1.5e- 17	(AE001 047) branch ed- chain amino acid ABC transp orter, ATP- bindin g protei n (braG- 2) [Archa eoglob us fulgid us]
171839	ATU033 779	ATL8C2 1258:1 690..2 103	nap									g42062 07	38	223	1.9e- 20	(AF071 527) putati ve

171840	ATU033 780	ATL8S1 2735:1 53..27 3	nap									g45389 14	38	141	6.1e- 11	(AI049 482) hypoth etical protei n [Arabi dopsis thalia na]	revers e transc riptas e [Arabi dopsis thalia na]
171841	ATU033 781	ATL8C9 576:11 50..15 07	nap									g42621 56	38	343	8.8e- 25	(AC005 275) putati ve compon ent of cytoch rome B6-F comple x [Arabi dopsis thalia na]	compon ent of cytoch rome B6-F comple x [Arabi dopsis thalia na]
171842	ATU033 782	ATL8C3 7799:3 000..1 895	nap									g48951 83	38	846	2.1e- 87	(AC007 661) hypoth etical protei n	hypoth etical protei n [Arabi dopsis thalia na]

171843	ATU033 783	ATL8C4 2548:9 27..1	nap								q22528 49	38	596	5.0e- 62	[Arabi dopsis thalia na] (AF013 294) contai ns simila rity to gag protei ns [Arabi dopsis thalia na]
171844	ATU033 784	ATL8C1 7709:1 223..1	nap								g32560 68	38	286	2.2e- 26	(Y1406 8) Heat Shock Factor 3 [Arabi dopsis thalia na]
171845	ATU033 785	ATL8S2 4602:6 34..1	nap								g11435 91	38	438	1.3e- 43	(Z4880 1) alkali ne phosph atase [Synec hococc us PCC794 2]
171846	ATU033 786	ATL8C2 5807:1	nap								g45859 93	38	167	6.1e- 11	(AC005 287)

171850	ATU033 790	ATL8C4 0198:3 079..1 545	nap									g33193 60	38	1548	3.0e- 142	(AF077 408) contai ns simila rity to Vicia faba retrot ranspo son- like gene (GB:AB 007467) [Arabi dopsis thalia na]
171851	ATU033 791	ATL8S9 834:1. .591	nap									g48039 51	38	451	2.2e- 33	(AC006 202) unknow n protei n [Arabi dopsis thalia na]
171852	ATU033 792	ATL8C1 3584:3 26..81 3	nap									g44902 96	38	268	7.2e- 27	(AL035 678) hypoth etical protei

171853	ATU033 793	ATL8C5 0213:1 ..619	nap						ATL8C5 0213:4 4..619	1.00		g31270 31	37	369	6.2e- 34	(AF014 802) (S)-N- methyl coclaui rine 3'- hydrox ylase [Eschs cholz a califo rnica]	n [Arabi dopsis thalia na]
171854	ATU033 794	ATL8C3 9296:1 ..1062	nap									g42635 43	38	1121	5.0e- 118	(AC006 250) putati ve Athila retroe lement ORF1 protei n [Arabi dopsis thalia na]	n [Arabi dopsis thalia na]
171855	ATU033 795	ATL8C1 3914:2 623..3 247	nap									g45444 33	38	107	0.10	(AC006 955) hypoth etical protei n [Arabi dopsis thalia na]	n [Arabi dopsis thalia na]

171856	ATU033 796	ATL8S8 98:1.. 362	nap									g42636 44	38	343	4.2e- 34	dopsis thalia nal (AC006 136) putati ve Athila -like protei n [Arabi dopsis thalia nal]
171857	ATU033 797	ATL8C2 1244:2 504..2 350	nap									g47340 12	38	109	4.2e- 07	(AC007 112) hypoth etical protei n [Arabi dopsis thalia nal]
171858	ATU033 798	ATL8S1 2084:1 ..347	nap									g17870 33	38	161	2.3e- 09	(AE000 183) putati ve transm embran e subuni t [Esche richia coli]
171859	ATU033 799	ATL8S2 9152:1 ..522	nap									g13614 24	38	104	2.9e- 08	strU protei n -

171862	ATU033 802	ATL8C2 5961:5 78..1	nap										g44544 76	38	116	1.1e- 10	(AC006 234) hypoth etical protei n [Arabi dopsis thalia na]	rhabdi tis elegan s]
171863	ATU033 803	ATL8C1 38:192 2..1	nap										g44328 66	38	976		(AC006 300) putati ve revers e transc riptas e [Arabi dopsis thalia na]	(AC006 300) putati ve revers e transc riptas e [Arabi dopsis thalia na]
171864	ATU033 804	ATL8C4 6076:1 ..434	nap										g45444 15	38	538	1.3e- 47	(AC006 955) putati ve polypr otein [Arabi dopsis thalia na]	(AC006 955) putati ve polypr otein [Arabi dopsis thalia na]
171865	ATU033 805	ATL8C6 877:1. .1571	nap										g43357 20	38	920	6.5e- 90	(AC006 248) putati	(AC006 248) putati

171866	ATU033 806	ATL8S2 6078:6 00..12 5	nap									g17811 78	38	139	2.5e- 12	(Z8385 9) hypoth etical protei n Rv1869 C [Mycob acteri um tuberc ulosis]	ve revers e transc riptas e Tal- 1 [Arabi dopsis thalia na]
171867	ATU033 807	ATL8S2 6573:5 91..1	nap									g26059 34	38	916		(AF029 885) putati ve homose rine O- acetyl transf erase [Emeri cella nidula ns]	
171868	ATU033	ATL8C4	nap									g45586	38	158	3.7e-	(AC006	

171872	ATU033 812	ATL8C5 680:83 7..1	nap							g17070 07	38	348	(U7872 1) hypoth etical protei n [Arabi dopsis thalia na]	HYDROX YLASE) [Pseud omonas , AK1, Peptid e, 383 aa]
171873	ATU033 813	ATL8C1 0226:8 49..49 6	nap							g48352 32	38	228	(AL049 862) putati ve protei n [Arabi dopsis thalia na]	cytoch rome P450ty r - sorghu m [Sorgh um bicolo r]
171874	ATU033 814	ATL8C8 142:27 75..16 63	nap							g21300 96	38	532	4.6e- 46	
171875	ATU033 815	ATL8C4 1717:5	nap							g39153 97	38	111	4.5e- 09	HYPOTH ETICAL

171883	ATU033 823	ATL8C2 2375:4 663..1 858	nap							g43098 68	38	883	5.3e- 56	(AC006 527) putati ve retrot ranspo son- like orf [Arabi dopsis thalia nal
171884	ATU033 824	ATL8S3 0592:4 54..1	nap							g73183 4	38	260	3.0e- 25	HYPOTH ETICAL 41.9 KD PROTEI N IN SDS3- THS1 INTERG ENIC REGION [Sacch aromyc es cerevi siae]
171885	ATU033 825	ATL8S1 4839:1 ..480	nap							g17810 49	38	388	1.5e- 31	(Z8386 3) hypoth etical protei n Rv2553 C [Mycob acteri um

171886	ATU033 826	ATL8S1 8542:5 35..1	nap									g26741 8	38	481	2.4e- 38	tuberc ulosis J MANNOS E-6- PHOSPH ATE ISOMER ASE (PHOSP HOMANN OSE ISOMER ASE) (PMI) (PHOSP HOHEXO MUTASE) / MANNOS E-1- PHOSPH ATE GUANYL YL TRANSF ERASE (GDP) (GDP- MANNOS E PYROPH OSPHOR YLASE) (GMP) [Xanth omonas campes tris] (AJ132
171887	ATU033	ATL8C2	nap									g46783	38	440		

	827	7768:1 476..1 108							66								435) GA 2- oxidase [Arabi dopsis thalia na]
171888	ATU033 828	ATL8C4 3661:4 03..1	nap						g11687 30	38	207						CINNAM YL- ALCOHO L DEHYDR OGENAS E ELI3-2 (CAD) [Arabi dopsis thalia na]
171889	ATU033 829	ATL8C2 3838:4 3..145 4	nap						g45860 53	38	371						(AC007 020) putati ve lacasse [Arabi dopsis thalia na]
171890	ATU033 830	ATL8C1 5943:1 155..5 071	nap						g23889 70	38	974						(Z9897 9) tat bindin g homolo g [Schiz osacch aromyc

171897	ATU033 837	73..1	ATL8C6 799:21 63..23 0	nap							g10762 91	38	226	2.9e- 20	amino acid transp orter AAT1 - Arabid opsis thalia na [Arabi dopsis thalia na] 12894
171898	ATU033 838	ATL8C1 1496:1 851..1 293	nap						ATL8C1 1496:1 531..1 293	0.99	g44540 31	37	368	6.1e- 29	(AL035 394) putati ve protei n [Arabi dopsis thalia na] 12894
171899	ATU033 839	ATL8C1 0982:1 ..968	nap						ATL8C1 0982:6 3..968	0.99	g47738 99	37	110	0.0007 5	(AF074 021) hypoth etical protei n [Arabi dopsis thalia na] 12894
171900	ATU033 840	ATL8C3 817:1.	nap						ATL8C3 817:39	0.99	g45389 44	37	102	0.0023	(AL049 483) 12894

171905 171906 171907
 171905 171906 171907
 171905 171906 171907

171905	ATU033 845	ATL8C3 4754:9 79..14 98	nap						ATL8C3 4754:1 247..1 051	0.98	g36881 81	37	378	1.4e- 36	(IMIDA ZOLE - PHOSPH ATE TRANSA MINASE) [Haemo philus influe nzae Rd]
171906	ATU033 846	ATL8C1 2821:1 077..4 9	nap						ATL8C1 2821:1 014..4 9	0.97	g42180 11	37	536	1.8e- 52	(AC006 135) putati ve protei n kinase [Arabi dopsis thalia na]
171907	ATU033 847	ATL8C1 2213:1 ..1638	nap						ATL8C1 2213:1 94..16	0.97	g45673 22	37	683	3.3e- 95	(AC005 956) hypoth

171908	ATU033 848	ATL8C2 6374:1 ..803	nap						38	ATL8C2 6374:1 89..80 3	0.96	g22450 35	37	747	9.7e- 68	(Z9734 2) hypoth etical protei n [Arabi dopsis thalia na]
171909	ATU033 849	ATL8S2 5444:1 ..549	nap							ATL8S2 5444:3 8..496	0.96	g10968 51	37	195	1.3e- 19	DNA helica se [Bacil lus subtil is]
171910	ATU033 850	ATL8C4 6990:1 269..1	nap							ATL8C4 6990:1 093..1 57	0.95	g26621 53	37	223	2.9e- 15	(AB007 896) KIAA04 36 [Homo sapien s]
171911	ATU033 851	ATL8C2 9479:5 56..1	nap							ATL8C2 9479:4 29..22	0.94	g27086 66	37	472	1.0e- 36	(AF037 441) putati ve 54.5 kDa protei n [Edwar

171912	ATU033 852	ATL8C4 5081:6 53..1	nap					ATL8C4 5081:5 09..34 4	0.94	g28530 84	37	850	8.2e- 58	(AL021 768) putati ve protei n [Arabi dopsis thalia na]
171913	ATU033 853	ATL8S1 3428:3 9..568	nap					ATL8S1 3428:2 25..54 8	0.94	g30248 72	37	564	2.9e- 57	HYPOTH ETICAL 52.8 KD PROTEI N SLR007 4 [Synec hocyst is sp.]
171914	ATU033 854	ATL8S1 2215:1 ..519	nap					ATL8S1 2215:8 9..437	0.93	g22380 5	37	509	3.1e- 50	Gln synthe tase [Anaba ena sp.]
171915	ATU033 855	ATL8C1 4837:1 420..1	nap					ATL8C1 4837:1 397..1 42	0.93	g46801 83	37	406	2.4e- 34	(AF111 709) gag- pol protei n [Oryza sativa]

171916	ATU033 856	ATL8S2 7726:5 74..21 9	nap						ATL8S2 7726:5 08..21 9	0.93	g26268 20	37	139	0.0005 3	(D8396 7) YfkH [Bacil lus subtil is]
171917	ATU033 857	ATL8C2 9696:1 460..1	nap						ATL8C2 9696:1 449..2 31	0.93	g28530 80	37	862	2.3e- 83	(AL021 768) TMV resist ance protei n N- like [Arabi dopsis thalia na]
171918	ATU033 858	ATL8S4 40:1.. 474	nap						ATL8S4 40:73. .385	0.92	g30251 87	37	226	1.4e- 22	HYPOTH ETICAL 45.1 KD PROTEI N SLR160 8 [Synec hocyst is sp.]
171919	ATU033 859	ATL8C4 5092:7 54..51 1	nap						ATL8C4 5092:7 02..51 1	0.92	g17698 99	37	108	1.8e- 05	(Y0801 0) lectin recept or kinase

171920	ATU033 860	ATL8C4 3257:1 ..256	nap				ATL8C4 3257:9 ..212	0.91	g43622 6	37	105	6.8e- 08	[Arabi dopsis thalia na] (D2606 8) KIAA00 38 [Homo sapien s]
171921	ATU033 861	ATL8S2 9057:5 84..1	nap				ATL8S2 9057:5 80..47	0.91	g38609 30	37	567	5.8e- 56	(AJ235 271) LYSYL- tRNA SYNTH TASE (lyss) [Ricke ttsia prowaz ekil]
171922	ATU033 862	ATL8S2 6080:1 ..511	nap				ATL8S2 6080:2 5..464	0.91	g10840 47	37	539	5.9e- 52	UDP- glucos e dehydr ogenas e (EC 1.1.99 .-) - Xantho monas campes tris pv. campes tris [Xanth omonas campes

171923	ATU033 863	ATL8C3 076:1. .745	nap				ATL8C3 076:57 .745	0.90	g12923 2	37	506	2.0e- 49	ORYZAI N BETA CHAIN PRECUR SOR [Oryza sativa]
171924	ATU033 864	ATL8S1 0289:4 90..1	nap				ATL8S1 0289:4 72..18	0.90	g28296 48	37	401	2.5e- 38	HYPOTH ETICAL 50.2 KD PROTEI N IN KDUI- LYSS INTERG ENIC REGION [Esche richia coli]
171925	ATU033 865	ATL8C3 5040:1 547..7 45	nap				ATL8C3 5040:1 457..7 45	0.90	g21298 44	37	702	1.8e- 76	stress - induce d protei n stil - soybea n []
171926	ATU033 866	ATL8S2 9667:1 ..614	nap				ATL8S2 9667:4 1..569	0.90	g45394 60	37	253	1.8e- 21	(Al049 500) putati ve protei n [Arabi dopsis

171927	ATU033 867	ATL8S1 2719:1 ..510	nap				ATL8S1 2719:5 1..459	0.90	g40076 81	37	353	4.7e- 14	thalia nal (AL034 443) putati ve integr al membra ne transp orter [Strep tomyce s coelic olor]
171928	ATU033 868	ATL8C2 092:13 66..1	nap				ATL8C2 092:12 13..11 6	0.89	g33778 16	37	382	5.2e- 42	(AF076 275) contai ns simila rity to Arabid opsis thalia na retrot ranspo son Athila (GB:X8 1801) [Arabi dopsis thalia nal]
171929	ATU033 869	ATL8C3 5586:2	nap				ATL8C3 5586:2	0.89	g12002 05	37	84	0.0013	(X9575 3) DAG

171930	ATU033 870	507..1 913	nap				261..1 913	0.89	g11278 5	37	103	4.9e- 07	[Antir rhinum majus] DNA-3- METHYL ADENIN E GLYCOS IDASE I (3- METHYL ADENIN E-DNA GLYCOS YLASE I, CONSTI TUTIVE) (TAG I) [Esche richia coli]
171931	ATU033 871	ATL8S1 1647:1 ..501	nap				ATL8S1 1647:1 27..49 2	0.89	g46894 79	37	311	2.1e- 31	(AC007 213) hypoth etical protei n [Arabi dopsis thalia na]
171932	ATU033 872	ATL8S2 8354:2 90..55 2	nap				ATL8S2 8354:2 93..53 9	0.89	g31231 48	37	207	3.7e- 12	HYPOTH ETICAL 26.2 KD PROTEI N IN MUTH-

171933 171934 171935
 171933 171934 171935
 171933 171934 171935

171933	ATU033 873	ATL8S2 7703:5 40..1	nap						ATL8S2 7703:5 40..7	0.88	g26226 01	37	188	3.4e- 19	TAS INTERG ENIC REGION [Esche richia coli]
171934	ATU033 874	ATL8C4 5640:1 01..12 32	nap						ATL8C4 5640:1 01..11 77	0.88	g22451 30	37	1048	6.4e- 60	(Z9734 4) GLABRA 2 homolo g [Arabi dopsis thalia nal]
171935	ATU033 875	ATL8C1 747:1. .866	nap						ATL8C1 747:45 ..866	0.87	g21298 26	37	867	5.8e- 89	dynami n-like protei n

171936	ATU033 876	ATL8C2 0203:1 04..17 50	nap						ATL8C2 0203:1 04..17 50	0.87	g40380 57	37	771	1.1e- 65	(AC005 897) hypoth etical protei n [Arabi dopsis thalia na]	phragm oplast in 5 - soybea n [Glyci ne max]
171937	ATU033 877	ATL8C2 1456:9 22..39 6	nap						ATL8C2 1456:8 73..39 6	0.87	g37765 64	37	533	9.9e- 56	(AC005 388) Simila r to hypoth etical protei n T1D16. 16 [Arabi dopsis thalia na]	(AC005 388) Simila r to hypoth etical protei n T1D16. 16 [Arabi dopsis thalia na]
171938	ATU033 878	ATL8C2 2530:1 67..12 96	nap						ATL8C2 2530:2 41..12 23	0.86	g34618 39	37	487	2.9e- 43	(AC005 315) putati ve recept or protei n	(AC005 315) putati ve recept or protei n

171939	ATU033 879	ATL8C1 3261:1 ..1015	nap				ATL8C1 3261:6 5..797	0.86	g45812 05	37	804	7.0e-69	kinase [Arabi dopsis thaliana]
171940	ATU033 880	ATL8C7 753:22 9..122 2	nap				ATL8C7 753:22 9..104 1	0.86	g45811 50	37	493	3.9e-47	(AC006 919) hypoth etical protei n [Arabi dopsis thaliana]
171941	ATU033 881	ATL8S7 317:57 7..50	nap				ATL8S7 317:51 7..50	0.86	g29828 87	37	249	4.5e-21	(AE000 676) DAPA aminot ransfe rase [Aquif ex

171942	ATU033 882	ATL8C8 954:10 12..1	nap				ATL8C8 954:10 05..25 2	0.86	g44163 01	37	1239	7.1e- 84	aeolic us] (AF105 716) gag protei n [Zea mays]
171943	ATU033 883	ATL8C5 916:1. .428	nap				ATL8C5 916:29 0..28	0.86	g46783 73	37	287		(AL049 656) putati ve protei n [Arabi dopsis thalia na]
171944	ATU033 884	ATL8C3 6104:6 98..47 2	nap				ATL8C3 6104:6 43..49 3	0.85	g45443 84	37	168	7.6e- 13	(AC007 047) unknow n protei n [Arabi dopsis thalia na]
171945	ATU033 885	ATL8C3 7621:1 152..1	nap				ATL8C3 7621:1 043..6 82	0.85	g37023 39	37	91	0.025	(AC005 397) unknow n protei n [Arabi dopsis thalia na]
171946	ATU033	ATL8C4	nap				ATL8C4	0.85	g11682	37	677	7.3e-	ASPART

171949	ATU033 889	ATL8C3 1997:1 ..2988	nap				ATL8C3 1997:2 07..29 88	0.83	g39249 31	37	142	3.1e- 16	(AF028 808) hemin- sensit ive initia tion factor 2 alpha kinase [Mus muscul us]
171950	ATU033 890	ATL8C3 9930:1 ..3904	nap				ATL8C3 9930:2 58..33 80	0.83	g18421 11, g31324 79	37, 32	125, 1910	0.0051 , 1.6e- 181	(U8758 6) decoy [Arabi dopsis thalia nal; (AC003 096) multid rug resist ance- associ ated protei n, AtMRP2 [Arabi dopsis thalia nal]
171951	ATU033 891	ATL8C2 2950:1 ..1437	nap				ATL8C2 2950:1 146..6 45	0.83	g29824 59	37	191	1.1e- 13	(AL022 223) putati ve

171952	ATU033 892	ATL8C1 2887:1 ..685	nap					ATL8C1 2887:2 46..68 5	0.83	g42637 87	37	366	1.0e- 34	protei n [Arabi dopsis thalia nal] (AC006 068) unknow n protei n [Arabi dopsis thalia nal] (Y0850 2) orf205 [Arabi dopsis thalia nal]
171953	ATU033 893	ATL8S9 345:1. .339	nap					ATL8S9 345:14 0..339	0.82	g17857 79	37	263	3.1e- 12	(Y0850 2) orf205 [Arabi dopsis thalia nal]
171954	ATU033 894	ATL8C3 0963:1 1795.. 10697	nap					ATL8C3 0963:1 1507.. 10697	0.82	g29827 24	37	187	7.8e- 07	(AB012 222) trypto phan- tRNA synthe tase [Cavia porcel lus]
171955	ATU033 895	ATL8S5 557:1. .458	nap					ATL8S5 557:67 ..394	0.82	g48369 28	37	572	5.8e- 57	(AC006 085) Simila r to protei n kinase

171956	ATU033 896	ATL8S1 2117:5 00..10 8	nap						ATL8S1 2117:4 98..10 8	0.82	g32578 10	37	232	1.8e- 20	s [Arabi dopsis thalia nal] (AP000 006) 307aa long hypoth etical phosph oglyce rate dehydr ogenas e [Pyroc occus horiko shii]
171957	ATU033 897	ATL8C5 0062:1 62..52 7	nap						ATL8C5 0062:1 62..47 3	0.81	g33288 31	37	126	1.6e- 11	(AE001 313) SAM depend ent methyl transf erase [Chlam ydia tracho matis]
171958	ATU033 898	ATL8S1 5796:2 10..1	nap						ATL8S1 5796:1 73..36	0.81	g33197 59	37	104	3.1e- 07	(AL031 035) riboso me recycl ing factor

171959	ATU033 899	ATL8C2 3873:1 ..1725	nap					ATL8C2 3873:4 75..15 50	0.81	g45444 40	37	1147	4.0e- 85	(AC006 592) unknown protein [Arabi dopsis thalia na]
171960	ATU033 900	ATL8C2 5564:6 ..886	nap					ATL8C2 5564:6 ..797	0.81	g42180 11	37	1050	4.8e- 68	(AC006 135) putative protein kinase [Arabi dopsis thalia na]
171961	ATU033 901	ATL8S3 934:1. .453	nap					ATL8S3 934:11 4..441	0.81	g22447 86	37	748	7.4e- 60	(Z9733 5) ribonu cleopr oteins homolo g [Arabi dopsis thalia na]
171962	ATU033 902	ATL8C3 7092:1 867..1	nap					ATL8C3 7092:1 776..1	0.80	g44172 74	37	719		(AC007 019) hypoth

[illegible]

								50								etical protei n [Arabi dopsis thalia nal]
171963	ATU033 903	ATL8S6 779:51 7..1	nap					ATL8S6 779:41 8..31	0.80		g13731 8	37	215	2.2e- 21	51.5 KD PROTEI N [Lacto coccus 1 bacter iophag e]	
171964	ATU033 904	ATL8C3 5385:2 347..1 212	nap					ATL8C3 5385:2 336..1 212	0.80		g40080 10	37	927	8.6e- 80	(AF084 036) recept or- like protei n kinase [Arabi dopsis thalia nal]	
171965	ATU033 905	ATL8C3 2107:1 ..1060	nap					ATL8C3 2107:8 8..780	0.79		g26513 00	37	836	1.2e- 90	(AC002 336) putati ve initia tor trNA phosph oribos yl- transf	

171966
 ATU033
 906
 nap
 ATL8S2
 6702:6
 94..45
 ATL8S2
 6702:6
 78..45
 0.79
 g27023
 76
 37
 426
 (AF038
 605)
 Simila
 r to
 acyl-
 CoA
 dehydr
 ogenas
 e;
 coded
 for by
 C.
 elegan
 s cDNA
 yk58h2
 .3;
 coded
 for by
 C.
 elegan
 s cDNA
 yk466c
 12.3;
 coded
 for by
 C.
 elegan
 s cDNA
 yk258d
 6.3;
 coded
 for by
 C.
 elegan
 s cDNA

171966	ATU033 906	nap	ATL8S2 6702:6 94..45	ATL8S2 6702:6 78..45	0.79	g27023 76	37	426	erase [Arabi dopsis thalia nal (AF038 605) Simila r to acyl- CoA dehydr ogenas e; coded for by C. elegan s cDNA yk58h2 .3; coded for by C. elegan s cDNA yk466c 12.3; coded for by C. elegan s cDNA yk258d 6.3; coded for by C. elegan s cDNA
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171967	ATU033 907	ATL8C3 3382:1 ..843	nap				ATL8C3 3382:5 ..616	0.79	g45805 75	37	303	1.1e- 22	ykl58e 10.3; coded for by C. elegan s cDNA yk427. ..[Caeno rhabdi tis elegan s]
171968	ATU033 908	ATL8C3 21:152 3..1	nap				ATL8C3 21:130 9..413	0.79	g25831 30	37	877	3.7e- 89	(AC002 387) putati ve revers e transc riptas e [Arabi dopsis thalia na]
171969	ATU033 909	ATL8S2 10:1..	nap				ATL8S2 10:16.	0.78	g25015 33	37	382	1.1e- 32	(AC002 387) putati ve revers e transc riptas e [Arabi dopsis thalia na]
													HYPOTH ETICAL

171970	ATU033 910	ATL8C3 7078:1 ..828	nap							0.78	g42042 78	37	648			PROTEI N HI0019 [Haemo philus influe nzae Rd] (AC004 146) putati ve Cytoch rome P450 protei n [Arabi dopsis thalia na]
171971	ATU033 911	ATL8C1 8890:1 020..1	nap							0.78	g44163 01	37	1395	4.0e- 109		(AF105 716) gag protei n [Zea mays]
171972	ATU033 912	ATL8S2 3640:1 ..525	nap							0.78	g12673 5	37	434	4.5e- 34		MALATE OXIDOR EDUCTA SE (NAD) (MALIC ENZYME) [Bacil lus stearo thermo]

171973	ATU033 913	ATL8S1 9079:5 90..1	nap				ATL8S1 9079:2 39..21 7	0.77	g44328 51	37	149	8.8e- 13	(AC006 300) hypoth etical protei n [Arabi dopsis thalia na]
171974	ATU033 914	ATL8C4 57:560 ..1	nap				ATL8C4 57:362 ..217	0.77	g45080 74	37	103	3.0e- 08	(AC005 882) 45341 [Arabi dopsis thalia na]
171975	ATU033 915	ATL8S1 9445:6 32..1	nap				ATL8S1 9445:5 46..99	0.77	g39287 30	37	228	7.0e- 18	(AL034 355) putati ve oxidor educta se [Strep tomyce s coelic olor]
171976	ATU033 916	ATL8S5 883:1. .453	nap				ATL8S5 883:48 ..365	0.77	g28296 38	37	185	2.7e- 08	HYPOTH ETICAL 45.3 KD PROTEI N IN MFD- COBB INTERG

171977	ATU033 917	ATL8C5 443:91 7..1	nap					ATL8C5 443:84 6..28	0.76		g46801 80	37	707	1.1e- 65	ENIC REGION [Esche richia coli] (AF111 709) polypr oteins [Oryza sativa subsp. indica]
171978	ATU033 918	ATL8C1 8636:1 142..1	nap					ATL8C1 8636:1 091..4 24	0.76		g39534 70	37	679	3.9e- 75	(AC002 328) F20N2. 15 [Arabi dopsis thalia na]
171979	ATU033 919	ATL8C2 4566:7 19..1	nap					ATL8C2 4566:4 83..13	0.76		g49143 81	37	613	1.6e- 57	(AC007 584) unknow n protei n [Arabi dopsis thalia na]
171980	ATU033 920	ATL8C4 8720:4 34..1	nap					ATL8C4 8720:4 34..75	0.76		g24982 89	37	140	1.2e- 14	DIHYDR ODIPIC OLINAT E REDUCT ASE [Metha nococc

171981	ATU033 921	ATL8C4 6616:7 86..33 73	nap					ATL8C4 6616:7 86..30 69	0.75	945811 64	37	836	6.2e- 80	us jannas chiil (AC006 220) putati ve polypr otein [Arabi dopsis thalia na]
171982	ATU033 922	ATL8S6 507:1. .603	nap					ATL8S6 507:84 ..586	0.75	g39928 1	37	683		CYTOCH ROME C OXIDAS E POLYPE PTIDE I (CYTOC HROME AA3 SUBUNI T 1) [Brady rhizob ium japoni cum]
171983	ATU033 923	ATL8C2 4838:1 040..1	nap					ATL8C2 4838:1 021..6 5	0.75	g41857 38	37	548	4.0e- 61	(AF079 998) putati ve glutam ate récept or [Arabi dopsis

171984	ATU033 924	ATL8C2 3693:1 460..1	nap					ATL8C2 3693:9 32..26	0.75	g48368 82	37	921	6.8e- 94	thalia na] (AC007 260) lcl pr t_seq No defini tion line found [Arabi dopsis thalia na]
171985	ATU033 925	ATL8C2 22:799 ..56	nap					ATL8C2 22:586 ..130	0.75	g29824 38	37	403	5.9e- 37	(AL022 224) cadine ne syntha se like protei n [Arabi dopsis thalia na]
171986	ATU033 926	ATL8C3 5449:1 ..2254	nap					ATL8C3 5449:1 657..2 5	0.75	g49268 20, g41153 61	37, 30	319, 200	3.4e- 29, 1.8e- 19	(AC004 135) T17H7. 5 [Arabi dopsis thalia na]; (AC005 957) hypoth etical

171987	ATU033 927	ATL8C2 5382:1 068..1 83	nap					ATL8C2 5382:8 99..40 0	0.74	g22752 13	37	341	8.1e- 17	protei n [Arabi dopsis thalia na] (AC002 337) hypoth etical protei n [Arabi dopsis thalia na]
171988	ATU033 928	ATL8C3 2942:1 913..1 25	nap					ATL8C3 2942:1 856..1 25	0.74	g22447 80	37	93	1.2e- 05	(Z9733 5) hypoth etical protei n [Arabi dopsis thalia na]
171989	ATU033 929	ATL8C1 0191:5 91..18 47	nap					ATL8C1 0191:5 91..16 48	0.74	g45393 35	37	235		(AL035 539) putati ve protei n [Arabi dopsis thalia na]
171990	ATU033 930	ATL8C2 1302:1 034..1	nap					ATL8C2 1302:9 18..10 5	0.74	g21911 83	37	899	1.3e- 93	(AF007 271) simila r to

171991	ATU033 931	ATL8S1 6847:5 11..1	nap						0.73	g17495 42	37	691	1.3e- 67	(D8916 7) simila r to Saccha romyce s cerevi siae 5- methyl tetrah ydropt eroylt riglut amate- homocy steine s- methyl transf erase, SWISS- PROT Access ion Number P05694 [Schiz
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171992	ATU033 932	ATL8C1 5036:1 ..1665	nap					ATL8C1 5036:1 03..16 48	0.73	g46801 83	37	423	1.2e- 35	osacch aromyc es pombel] (AF111 709) gag- pol protei n [Oryza sativa subsp. indica]
171993	ATU033 933	ATL8S2 0649:3 27..1	nap					ATL8S2 0649:3 27..67	0.73	g16527 50	37	203	6.4e- 16	(D9090 8) transc riptio nal regula tor [Synec hocyst is sp.]
171994	ATU033 934	ATL8S8 727:1. .509	nap					ATL8S8 727:78 ..473	0.73	g45212 47	37	719	9.7e- 73	(AB007 770) transl ation elonga tion factor 1 alpha [Asper gillus oryzae]
171995	ATU033	ATL8C1	nap					ATL8C1	0.73	g29353	37	230	5.4e-	(AF044

935	1936:7 85..1					1936:6 45..39		42		14	216) steroid 22- alpha- hydrox- ylase; DWF4; CYP90B 1 [Arabidopsis thaliana]
171996	ATU033 936	ATL8C5 034:59 9..1	nap			ATL8C5 034:48 1..28	0.72	g48368 98	37	641	9.1e- 65 (AC007 369) Hypothetical protein [Arabidopsis thaliana]
171997	ATU033 937	ATL8C1 6302:1 ..2065	nap			ATL8C1 6302:3 ..1732	0.72	g29613 73	37	1562	1.8e- 155 (AL022 141) putative diseases resistance protein [Arabidopsis thaliana]
171998	ATU033 938	ATL8C1 4137:1 ..562	nap			ATL8C1 4137:9 5..536	0.72	g23427 23	37	349	3.3e- 30 (AC002 341) unknown

171999	ATU033 939	ATL8C4 990:17 19..78 0	nap					ATL8C4 990:15 03..78 0	0.71	g29824 64	37	186	8.6e- 20	n protei n [Arabi dopsis thalia na]
172000	ATU033 940	ATL8C2 0761:1 75..72 7	nap					ATL8C2 0761:2 42..72 7	0.70	g47739 10	37	220	3.8e- 21	(AL022 223) putati ve protei n [Arabi dopsis thalia na]
172001	ATU033 941	ATL8C1 6342:2 27..25 69	nap					ATL8C1 6342:2 27..21 88	0.69	g45861 08	37	542	4.6e- 49	(AF147 259) No defini tion line found [Arabi dopsis thalia na]
														(AL049 638) putati ve transp ort protei n [Arabi dopsis thalia na]

172002	ATU033 942	ATL8C3 904:1. .1031	nap				ATL8C3 904:16 8..103 1	0.69	923426 94	37	1507	9.7e- 156	(AC000 106) Simila r to Vicia transc riptio n factor (gb X9 7908). [Arabi dopsis thalia na]
172003	ATU033 943	ATL8C4 0364:1 580..3 7	nap				ATL8C4 0364:1 510..3 7	0.69	945443 72	37	712	3.8e- 124	(AC006 920) putati ve revers e transc riptas e [Arabi dopsis thalia na]
172004	ATU033 944	ATL8S5 907:56 7..49	nap				ATL8S5 907:55 8..109	0.69	945391 73	37	350	2.0e- 29	(AL049 485) probab le aminot ransfe rase [Strep tomyce s coelic olor]

172005	ATU033 945	ATL8C4 5003:1 009..1	nap				ATL8C4 5003:9 54..16 9	0.69	g39129 17	37	1139	2.8e- 113	(AF001 308) putati ve NAK- like ser/th r protei n kinase [Arabi dopsis thalia na]
172006	ATU033 946	ATL8C4 9576:1 ..1495	nap				ATL8C4 9576:4 8..108 5	0.68	g30045 52	37	552	1.1e- 45	(AC003 673) unknow n protei n [Arabi dopsis thalia na]
172007	ATU033 947	ATL8C2 9319:2 25..10 50	nap				ATL8C2 9319:5 56..10 00	0.68	g24942 66	37	633	8.9e- 63	GTP- BINDIN G PROTEI N LEPA [Synec hocyst is sp.]
172008	ATU033 948	ATL8S2 0933:1 ..546	nap				ATL8S2 0933:1 90..53 8	0.68	g27086 66	37	320	2.6e- 26	(AF037 441) putati ve 54.5 kDa

172009	ATU033 949	ATL8S9 062:1. .465	nap					ATL8S9 062:23 2..328	0.67	g46783 73	37	56	0.0002 9	(AL049 656) putati ve protei n [Arabi dopsis thalia na]	protei n [Edwar dsiell a ictalu ri]
172010	ATU033 950	ATL8C1 1659:1 253..1	nap					ATL8C1 1659:1 253..1 05	0.67	g10762 74	37	537	1.4e- 54	cucumi sin (EC 3.4.21 .25) precu sor - muskm e lon (fragm ent) []	
172011	ATU033 951	ATL8S1 3835:5 36..1	nap					ATL8S1 3835:3 44..21 3	0.67	g12130 21	37	111	1.1e- 08	(X8471 0) ORF492 , surfac e antige n gene [Metha nosarc ina]	

172012	ATU033 952	ATL8C5 0204:6 63..20 6	nap				ATL8C5 0204:6 63..20 6	0.67	g35229 50	37	266	6.0e- 27	mazei] (AC004 411) hypoth etical protei n [Arabi dopsis thalia na]
172013	ATU033 953	ATL8C4 2542:1 ..1366	nap				ATL8C4 2542:6 5..102 1	0.66	g33193 60	37	1110	1.9e- 110	(AF077 408) contai ns simila rity to Vicia faba retrot ranspo son- like gene (GB:AB 007467) [Arabi dopsis thalia na]
172014	ATU033 954	ATL8C3 6705:5 87..1	nap				ATL8C3 6705:5 87..12 9	0.64	g22136 29	37	734	1.7e- 65	(AC000 103) F21J9. 21 [Arabi dopsis thalia na]

172015	ATU033 955	ATL8C4 9993:7 35..1	nap			ATL8C4 9993:4 85..78	0.64	g24438 79	37	775	8.6e- 70	(AC002 294) similar to jasmon ate induced protein gp Y11 483 18 83006 [Arabi dopsis thalia na]
172016	ATU033 956	ATL8C2 6409:1 ..1140	nap			ATL8C2 6409:1 45..11 11	0.64	g10016 22	37	142	7.1e- 06	(D6400 2) hypoth etical protein [Synec hocyst is sp.]
172017	ATU033 957	ATL8C1 1272:8 35..1	nap			ATL8C1 1272:8 35..94	0.63	g46783 62	37	792	9.9e- 37	(AL049 659) protein kinase -like protein [Arabi dopsis thalia na]
172018	ATU033	ATL8C2	nap			ATL8C2	0.63	g44173	37	462	1.1e-	(AC006

172019	958	1196:1 7932.. 17347					1196:1 7932.. 17347	0.63	g18715 96	37	728	2.1e- 69	31	446) hypoth etical protei n [Arabi dopsis thalia na]
	ATU033 959	ATL8S1 1610:1 ..547	nap				ATL8S1 1610:6 0..511	0.63	g18715 96	37	728	2.1e- 69		(Z9266 9) hypoth etical protei n Rv0223 C [Mycob acteri um tuberc ulosis]
172020	ATU033 960	ATL8S2 0552:5 49..1	nap				ATL8S2 0552:5 26..39	0.62	g73205 0	37	663	1.9e- 58		HYPOTH ETICAL 54.3 KD PROTEI N IN PEPA- GNTV INTERG ENIC REGION (F500) [Esche richia coli]
172021	ATU033 961	ATL8S1 3370:5	nap				ATL8S1 3370:4	0.62	g24980 87	37	220	4.0e- 21		PUTATI VE

172022	ATU033 962	38..1	45..14 3	0.62	g32830 72	37	472			COLANI C BIOSYN THESIS UDP- GLUCOS E LIPID CARRIE R TRANSF ERASE [Esche richia coli]
		ATL8C2 7265:7 34..1	ATL8C2 7265:5 55..77	0.62						(AF056 022) p60 katani n [Homo sapien s]
172023	ATU033 963	ATL8C3 3235:4 331..1	ATL8C3 3235:4 331..4 28	0.62	g48369 14	37	98	0.0014		(AC007 153) 68961 [Arabi dopsis thalia na]
172024	ATU033 964	ATL8C4 8317:1 634..1	ATL8C4 8317:1 566..1 59	0.62	g49143 43	37	1377	5.9e- 63		(AC005 489) F14N23 .29 [Arabi dopsis thalia na]
172025	ATU033 965	ATL8C2 7233:7	ATL8C2 7233:5	0.62	g30333 79	37	299	3.0e- 32		(AC004 238)

172026	ATU033 966	21..1	nap				23..7		0.62	g37790 21	37	1697		putative DNA-binding protein [Arabidopsis thaliana]
		ATL8C4 3366:1 545..1					ATL8C4 3366:1 448..1 7							(AC005 171) putative reverse transcriptase [Arabidopsis thaliana]
172027	ATU033 967	ATL8C1 6622:7 6..819	nap				ATL8C1 6622:1 07..75 0		0.61	g42043 03	37	657	1.0e- 61	(AC003 027) lcl prt_seq No definition line found [Arabidopsis thaliana]
172028	ATU033 968	ATL8C4 6551:3 193..1	nap				ATL8C4 6551:3 080..1		0.61	g28299 10	37	567	3.1e- 53	(AC002 291) Unknown

172029	ATU033 969	ATL8S1 4573:7 27..12 7	nap					642	ATL8S1 4573:3 18..21 0	0.61	g42630 46	37	330	6.9e- 22	n protei n, contai ns regula tor of chromo some conden sation motifs [Arabi dopsis thalia na]
172030	ATU033 970	ATL8C3 9238:1 ..879	nap						ATL8C3 9238:1 8..625	0.60	g45570 68	37	965	4.4e- 109	(AC007 045) putati ve pol ypr otein [Arabi dopsis thalia na]
172031	ATU033 971	ATL8C2 069:1. .1432	nap						ATL8C2 069:38 2..120 1	0.60	g45389 01	37	746	7.9e- 66	(Al049 482) RNA- direct

172032	ATU033 972	ATL8S2 3934:1 ..611	nap					ATL8S2 3934:4 1..592	0.59	g29244 52	37	385	1.8e- 32	(AL022 022) fadD19 [Mycob acteri um tuberc ulosis]	ed DNA polyme rase- like protei n [Arabi dopsis thalia na]
172033	ATU033 973	ATL8C1 4583:1 ..624	nap					ATL8C1 4583:3 17..53 5	0.59	g22136 32	37	438	3.2e- 48	(AC000 103) F21J9. 24 [Arabi dopsis thalia na]	ase- like protei n [Arabi dopsis thalia na]
172034	ATU033 974	ATL8S1 1874:5 40..1	nap					ATL8S1 1874:5 40..13 0	0.59	g10017 40	37	265	3.6e- 25	(D6400 4) CobW [Synec hocyst is sp.]	ase- like protei n [Arabi dopsis thalia na]
172035	ATU033 975	ATL8C3 2567:2 022..2 538	nap					ATL8C3 2567:2 214..2 054	0.59	g14953 66	37	240	3.6e- 47	(Z6937 0) nitrit e transp orter	ase- like protei n [Arabi dopsis thalia na]

172036	ATU033 976	ATL8C3 2387:1 ..778	nap					ATL8C3 2387:1 19..69 3	0.59	g34829 30	37	154	6.6e- 07	[Cucumis sativus]
172037	ATU033 977	ATL8C2 4212:8 58..1	nap					ATL8C2 4212:8 01..15 7	0.59	g32427 13	37	1133	1.1e- 105	(AC003 040) putative transposase [Arabidopsis thaliana]
172038	ATU033 978	ATL8C3 2264:3 785..1	nap					ATL8C3 2264:3 785..1 8	0.59	g40637 40	37	248	4.3e- 11	(AC005 851) putative Na/H antiporter [Arabidopsis thaliana]
172039	ATU033 979	ATL8S1 0777:2 85..41	nap					ATL8S1 0777:2 09..57	0.58	g38344 45	37	137	2.3e- 10	(AF071 885) ATP-

172040	ATU033 980	ATL8C3 34:697 ..249	nap					ATL8C3 34:661 ..249	0.58	g15523 79	37	201	8.4e- 20	depend ent Clp protea se proteo lytic subuni t 1 [Strep tomyce s coelic olor]
172041	ATU033 981	ATL8C4 3682:1 337..1	nap					ATL8C4 3682:1 128..2 51	0.58	g44552 40	37	471		(Y0815 5) pectin methyl esterase [Silen e latifo lia ssp. alba]
172042	ATU033 982	ATL8S1 1249:6 88..13 1	nap					ATL8S1 1249:5 95..13 1	0.58	g25985 75	37	217	5.1e- 18	(AL035 523) putati ve protei n [Arabi dopsis thalia nal]
														(Y1529 3) MtN21 [Medic

172043	ATU033 983	ATL8C2 0894:1 ..1407	nap					ATL8C2 0894:5 2..116 0	0.57	g33778 56	37	1498	1.5e- 135	ago trunca tula] (AF076 274) contai ns simila rity to revers e trancr iptase (Pfam: rvt.hm m, score: 19.54) and CCHC- type zinc finger s (Pfam: zf- CCHC.h mm, score: 12.35) [Arabi dopsis thalia nal (AP000 006) 454aa long hypoth
172044	ATU033 984	ATL8S2 9214:1 ..478	nap					ATL8S2 9214:1 10..40 6	0.57	g32578 46	37	194	3.1e- 13	

172045	ATU033 985	ATL8C3 2725:1 644..3 28	nap						ATL8C3 2725:1 598..3 28	0.56	g45824 89	37	843	2.9e- 69	(AL021 768) putati ve protei n [Arabi dopsis thalia na]	etical 4- aminob utyrate aminot ransfe rase [Pyroc occus horiko shii]
172046	ATU033 986	ATL8C1 6291:1 ..1811	nap						ATL8C1 6291:2 96..17 46	0.56	g37790 21	37	1112	1.1e- 123	(AC005 171) putati ve revers e transc riptase [Arabi dopsis thalia na]	(AC005 171) putati ve revers e transc riptase [Arabi dopsis thalia na]
172047	ATU033 987	ATL8C9 80:284 ..779	nap						ATL8C9 80:345 ..748	0.56	g44540 20	37	368	6.0e- 36	(AL035 396) putati ve protei	(AL035 396) putati ve protei

172048	ATU033 988	ATL8S1 9324:1 ..598	nap						ATL8S1 9324:1 15..56 4	0.56	g11729 14	37	642	1.0e- 63	PEPTID E CHAIN RELEASE E FACTOR 3 (RF- 3) [Haemo philus influe nzae Rd]	n [Arabi dopsis thalia na]
172049	ATU033 989	ATL8C2 7049:3 65..18 12	nap						ATL8C2 7049:3 65..17 82	0.56	g45672 09	37	743	6.1e- 50	(AC007 168) hypoth etical protei n [Arabi dopsis thalia na]	n [Arabi dopsis thalia na]
172050	ATU033 990	ATL8C3 4724:1 119..1	nap						ATL8C3 4724:9 87..46	0.55	g30634 45	37	705	1.4e- 50	(AC003 981) F22013 .7 [Arabi dopsis thalia na]	n [Arabi dopsis thalia na]
172051	ATU033 991	ATL8C1 0792:7 32..1	nap						ATL8C1 0792:6 85..38 0	0.55	g45845 34	37	627	2.9e- 64	(AL049 608) cytoch rome	n [Arabi dopsis thalia na]

172052	ATU033 992	ATL8C3 3885:1 ..1262	nap					ATL8C3 3885:2 69..12 62	0.55	g48742 85	37	903			p450- like protei n [Arabi dopsis thalia na]
172053	ATU033 993	ATL8C1 65:163 2..1	nap					ATL8C1 65:158 0..558	0.54	g36953 99	37	1040			(AC007 212) putati ve phosph atidyl inosit ol/pho phatid ylchol ine transf er protei n [Arabi dopsis thalia na]
															(AF096 372) contai ns simila rity to Arabid opsis thalia na retrot ranspo

172054	ATU033 994	ATL8C1 1010:1 469..1	nap					ATL8C1 1010:9 11..36 0	0.54	g21941 36	37	2249	1.6e- 223	son Athila (GB:X8 1801) [Arabi dopsis thalia nal (AC002 062) Strong simila rity to Zea mays retrot ranspo son Hopsco tch polypr otein (gb U1 2626). [Arabi dopsis thalia nal
172055	ATU033 995	ATL8C4 6699:1 323..1 13	nap					ATL8C4 6699:1 233..1 30	0.54	g38596 59	37	1145	4.4e- 55	(AL031 394) putati ve potass ium transp orter AtKT5p (AtKT5) [Arabi

172056	ATU033 996	ATL8C1 3098:6 66..22 2	nap					ATL8C1 3098:4 61..22 2	0.53	g43887 23	37	327	3.4e- 31	dopsis thalia na] (AC006 413) hypoth etical protei n [Arabi dopsis thalia na]
172057	ATU033 997	ATL8C2 9619:1 ..534	nap					ATL8C2 9619:2 75..48 4	0.53	g48039 33	37	355	3.0e- 29	(AC006 264) putati ve diseas e resist ance respon se protei n [Arabi dopsis thalia na]
172058	ATU033 998	ATL8S2 7179:3 05..1	nap					ATL8S2 7179:2 20..41	0.53	g29953 84	37	87	7.3e- 07	(AJ004 810) cytoch rome P450 monoox ygenas e [Zea mays]
172059	ATU033	ATL8C8	nap					ATL8C8	0.53	g44327	37	698	8.9e-	(AC006

999	250:1. .1120						250:12 7..951		94			73	437) putati ve Tnp2 Tam1 transp oson protei n [Arabi dopsis thalia nal]
172060	ATU034 000	ATL8C1 390:15 06..1	nap				ATL8C1 390:15 06..16 9	0.52	g49143 61	37	1565	1.4e- 114	(AC007 289) putati ve revers e transc riptas e [Arabi dopsis thalia nal]
172061	ATU034 001	ATL8C4 0243:8 5..362 2	nap				ATL8C4 0243:8 5..292 9	0.51	g45811 75, g40380 62	37, 37	1378, 1377	5.9e- 106, 6.1e- 105	(AC006 220) putati ve transp oson MuDR protei n [Arabi dopsis thalia nal]; (AC005

172062	ATU034 002	ATL8C3 2894:1 625..1	nap					ATL8C3 2894:1 506..4 2	0.50	g24438 87	37	645	4.7e- 66	(AC002 294) Simila r to transc riptio n factor gb 246 606 16 58307 and others [Arabi dopsis thalia na]	897) putati ve transp oson MuDR [Arabi dopsis thalia na]
172063	ATU034 003	ATL8C4 0841:8 99..1	nap					ATL8C4 0841:7 18..20	0.50	g35823 36	37	601	3.3e- 55	(AC005 496) hypoth etical protei n [Arabi dopsis thalia na]	(AC005 496) hypoth etical protei n [Arabi dopsis thalia na]
172064	ATU034 004	ATL8C6 786:70 0..262	nap					ATL8C6 786:46 2..323	0.50	g30803 61	37	290	9.2e- 25	(Al022 580) hypoth	(Al022 580) hypoth

172065	ATU034 005	ATL8C4 1139:1 ..553	nap				ATL8C4 1139:5 50..31 8	0.49	g28530 72	37	566	1.2e- 37	etical protei n [Arabi dopsis thalia na]
172066	ATU034 006	ATL8S1 7092:1 ..571	nap				ATL8S1 7092:4 73..87	0.48	g22262 59	37	262	3.1e- 17	(Y1408 4) hypoth etical protei n [Bacil lus subtil is]
172067	ATU034 007	ATL8C1 3688:2 8..894	nap				ATL8C1 3688:1 11..86 4	0.48	g45811 64	37	1131	1.1e- 114	(AC006 220) putati ve polypr otein [Arabi dopsis thalia na]
172068	ATU034 008	ATL8C6 436:12 56..1	nap				ATL8C6 436:12 56..27	0.47	g42630 63	37	902	9.3e- 78	(AC005 142) hypoth

								4						etical protei n [Arabi dopsis thalia na]
172069	ATU034 009	ATL8S2 6579:2 66..1	nap					ATL8S2 6579:2 50..22	0.47	g10840 23	37	101		3(or 17)bet a- hydrox yestero id dehydr ogenas e (EC 1.1.1. 51) - Comamo nas testos teroni []
172070	ATU034 010	ATL8C4 5781:9 98..1	nap					ATL8C4 5781:9 06..11 2	0.47	g44163 01	37	1435	2.4e- 113	(AF105 716) gag protei n [Zea mays]
172071	ATU034 011	ATL8C4 8482:2 79..14 97	nap					ATL8C4 8482:2 79..52 3	0.47	g22450 52	37	57	0.040	(Z9734 2) resist ance gene homolo g (fragm ent) [Arabi

172072	ATU034 012	ATL8C3 5924:1 052..1 910	nap						ATL8C3 5924:1 702..1 858	0.47	g48503 96	37	615	4.4e- 62	dopsis thalia na] (AC007 357) F3F19. 15 [Arabi dopsis thalia na]
172073	ATU034 013	ATL8S6 227:52 5..1	nap						ATL8S6 227:52 5..73	0.47	g26487 27	37	146		(AE000 977) ABC transp orter, ATP- bindin g protei n [Archa eoglob us fulgid us]
172074	ATU034 014	ATL8C2 2040:1 288..4 89	nap						ATL8C2 2040:1 148..4 89	0.46	g25831 71	37	130	2.2e- 12	(AF026 550) CCAAT- bindin g transc riptio n factor subuni t AAB- 1 [Neuro spora

172075	ATU034 015	ATL8S1 8309:5 98..1	nap				ATL8S1 8309:4 43..10 8	0.46	g40068 35	37	227	1.1e- 15	crassa J (AC005 970) hypoeth etical protein [Arabi dopsis thalia na]
172076	ATU034 016	ATL8C1 3117:7 68..12 32	nap				ATL8C1 3117:8 01..12 06	0.45	g31422 93	37	483	2.9e- 50	(AC002 411) Contai ns simila rity to myosin IB heavy chain gb X70 400 from Gallus gallus [Arabi dopsis thalia na]
172077	ATU034 017	ATL8C2 7267:2 23..49 1	nap				ATL8C2 7267:2 23..48 7	0.45	g44067 82	37	325		(AC006 532) hypoeth etical protein [Arabi na]

172078	ATU034 018	ATL8C4 4499:1 ..877	nap					ATL8C4 4499:6 4..629	0.44	g42630 63	37	909	9.7e- 69	dopsis thalia nal (AC005 142) hypoth etical protei n [Arabi dopsis thalia nal]
172079	ATU034 019	ATL8S1 0400:5 31..1	nap					ATL8S1 0400:4 78..9	0.44	g10016 93	37	73	6.7e- 06	(D6400 2) hypoth etical protei n [Synec hocyst is sp.]
172080	ATU034 020	ATL8C2 4348:1 254..1	nap					ATL8C2 4348:1 254..2 7	0.44	g22449 83	37	1896	1.9e- 170	(Z9734 0) phytoc hrome D [Arabi dopsis thalia nal]
172081	ATU034 021	ATL8S2 3131:5 06..1	nap					ATL8S2 3131:4 46..75	0.44	g27915 85	37	250	1.5e- 24	(AL021 287) leuC [Mycob acteri um tuberc ulosis]

[illegible]

172082	ATU034 022	ATL8S2 5727:5 80..1	nap				ATL8S2 5727:5 17..33	0.43	g21606 92	37	559	8.6e- 51	(U7352 7) B' regula tory subuni t of PF2A [Arabi dopsis thalia na]
172083	ATU034 023	ATL8S1 8405:1 ..442	nap				ATL8S1 8405:1 39..35 1	0.43	g11710 03	37	478	8.8e- 46	PROBAB LE PHOSPH ORIBOS YLGLYC INAMID E FORMYL TRANSF ERASE 2 (GART 2) (GAR TRANSF ORMYLA SE 2) (5'- PHOSPH ORIBOS YLGLYC INAMID E TRANSF ORMYLA SE 2) (FORMA TE-

172084	ATU034 024	ATL8C1 3558:1 ..1270	nap						ATL8C1 3558:1 05..69 4	0.42	g39550 21	37	223	3.9e- 16	DEPEND ENT GAR TRANSF ORMYLA SE) (MEMBR ANE PROTEI N ANTIGE N 1) [Paste urella haemol ytical (AJ010 811) HB2 homeod omain protei n [Popul us tremul a x Populu s tremul oides] (AC006 161) simila r to leucin e zipper transc riptio
172085	ATU034 025	ATL8S1 125:1. .548	nap						ATL8S1 125:35 0..473	0.41	g42622 10	37	238	6.4e- 23	

172086	ATU034 026	ATL8C5 76:1.. 1253	nap						ATL8C5 76:312 ..1116	0.41	g34026 72	37	432	1.4e- 50	n factor [Arabi dopsis thalia na]
															(AC004 697) putati ve white protei n [Arabi dopsis thalia na]
172087	ATU034 027	ATL8S2 9814:4 63..1	nap						ATL8S2 9814:2 90..83	0.41	g30252 54	37	246	1.0e- 17	HYPOTH ETICAL 46.8 KD PROTEI N IN LPP- AROD INTERG ENIC REGION [Esche richia coli]
172088	ATU034 028	ATL8C1 4913:7 14..1	nap						ATL8C1 4913:2 09..13 7	0.40	g44328 48	37	186	1.1e- 15	(AC006 300) hypoth etical protei n [Arabi dopsis thalia

172089	ATU034 029	ATL8S3 0450:2 28..44 3	nap				ATL8S3 0450:2 28..40 7	0.40	g15192 87	37	137	2.1e- 07	nal (U6618 6) Lema [Liste ria monocy togene s]
172090	ATU034 030	ATL8C2 719:19 51..1	nap				ATL8C2 719:19 51..12 48	0.40	g22448 66	37	2746	2.3e- 248	(Z9733 7) hypoth etical protei n [Arabi dopsis thalia nal]
172091	ATU034 031	ATL8C1 2117:2 303..4 783	nap						g42638 31	37	2182	1.9e- 192	(AC006 067) putati ve revers e transc riptas e [Arabi dopsis thalia nal]
172092	ATU034 032	ATL8C1 2117:2 324..1 317	nap						g33778 16	37	1088	1.1e- 104	(AF076 275) contai ns simila rity to Arabid

172100	ATU034 040	..518	nap										g41153 65	37	1618	2.6e- 162	(AC005 957) revers e transc riptas e-like protei n [Arabi dopsis thalia na]	No defini tion line found [Arabi dopsis thalia na]
172101	ATU034 041	ATL8C1 6924:1 704..1	nap										g45103 45	37	153	3.2e- 10	(AC006 921) unknow n protei n [Arabi dopsis thalia na]	(AC006 921) unknow n protei n [Arabi dopsis thalia na]
172102	ATU034 042	ATL8C3 7931:1 ..1681	nap										g34618 40	37	1786	1.2e- 173	(AC005 315) putati ve revers e transc riptas	(AC005 315) putati ve revers e transc riptas

172103	ATU034 043	ATL8C1 283:1. .1439	nap									g38105 96	37	520	5.2e- 48	(AC005 398) revers e- transc riptas e-like protei n [Arabi dopsis thalia na]
172104	ATU034 044	ATL8C1 2843:1 023..1	nap									g23426 80	37	667	3.0e- 71	(AC000 106) F7G19. 8 [Arabi dopsis thalia na]
172105	ATU034 045	ATL8S2 3025:5 55..1	nap									g37903 57	37	166	3.7e- 17	(D6414 4) transp osase [Ralst onia eutrop ha]
172106	ATU034 046	ATL8C1 3118:1 257..1	nap									g45859 76	37	269	4.4e- 14	(AC005 287) Unknow n protei n

172107	ATU034 047	ATL8C4 8857:7 14..18 09	nap							g42042 84	37	560	4.9e- 54	[Arabi dopsis thalia na] (AC003 027) lcl pr t_seq No defini tion line found [Arabi dopsis thalia na]
172108	ATU034 048	ATL8C4 8430:1 ..211	nap							g43253 67	37	338	2.2e- 08	(AF128 396) contai ns simila rity to Nicoti ana tabacu m B- type cyclin (GB:D5 0737) [Arabi dopsis thalia na]
172109	ATU034 049	ATL8C4 8008:4 375..4 693	nap							g44540 09	37	274	3.0e- 15	(AL035 396) putati ve

172110	ATU034 050	ATL8C4 0311:1 ..740	nap							g42204 58	37	651	7.2e- 65	(AC006 216) Simila r to [Arabi dopsis thalia na]
172111	ATU034 051	ATL8C1 584:79 8..1	nap							g47739 20	37	995	5.5e- 88	(AF147 259) F10A2. 17 gene produc t [Arabi dopsis thalia na]
172112	ATU034 052	ATL8C5 367:1. .484	nap							g34213 84	37	431	5.4e- 44	(AF081 067) IAA- Ala hydrol ase; IAA- amino acid hydrol ase [Arabi dopsis thalia na]

172113 172114 172115
 172113 172114 172115
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172113	ATU034 053	ATL8C3 9433:6 94..1	nap							g45862 60	37	194	6.6e- 09	(AL049 640) putati ve protei n [Arabi dopsis thalia na]
172114	ATU034 054	ATL8C1 9200:6 05..1	nap							g34829 70	37	196	3.7e- 20	(AL031 369) putati ve protei n [Arabi dopsis thalia na]
172115	ATU034 055	ATL8C3 9629:1 029..1	nap							g36000 40	37	488	6.9e- 50	(AF080 119) simila r to Arabid opsis thalia na diseas e resist ance protei n RPS2 (GB:U1 4158) [Arabi dopsis thalia na]

172116	ATU034 056	ATL8C1 6621:2 147..1 696	nap							g22449 66	37	210	1.5e- 17	(Z9734 0) unname d protei n produc t [Arabi dopsis thalia na]
172117	ATU034 057	ATL8S1 5492:3 83..1	nap							g49724 2	37	232	1.5e- 05	(U0898 5) plasma - membra ne H+ ATPase [Zea mays]
172118	ATU034 058	ATL8C4 7146:1 474..1	nap							g48742 84	37	569	1.6e- 62	(AC007 212) putati ve mitoch ondria l protei n [Arabi dopsis thalia na]
172119	ATU034 059	ATL8C4 3558:5 978..5 436	nap							g43712 85	37	645		(AC006 260) hypothe tical protei n

172123	ATU034 063	ATL8C2 1561:5 66..15 7	nap									g46783 52	37	575	1.7e- 54	(AL049 659) putati ve protei n [Arabi dopsis thalia na]	.19 [Arabi dopsis thalia na]
172124	ATU034 064	ATL8S1 5066:6 54..1	nap									g28516 54	37	610	2.5e- 53	2- DEHYDR O-3- DEOXY HOSPHO GALACT ONATE ALDOLA SE (6- PHOSPH O-2- DEHYDR O-3- DEOXYG ALACTO NATE ALDOLA SE) (2- OXO-3- DEOXYG ALACTO NATE 6- PHOSPH	

172125	ATU034 065	ATL8C2 5581:1 ..496	nap										g31767 18	37	300	2.3e- 28	ATE ALDOLA SE) / GALACT ONATE DEHYDR ATASE [Esche richia colil]
172126	ATU034 066	ATL8S1 869:21 8..347	nap										g17105 05	37	93	1.2e- 05	50S RIBOSO MAL PROTEI N l18 [Vibri o proteo lyticu s]
172127	ATU034 067	ATL8S1 9149:5 89..1	nap										g46783 25	37	145	2.0e- 06	(AL049 658) putati ve protei n [Arabi dopsis thalia na]

172134	ATU034 074	ATL8C4 4703:1 ..414	nap										g26186 94	37	422	2.5e- 24	(AC002 510) putati ve zinc- finger protei n [Arabi dopsis thalia nal]	hydrat ase, class II (fumC) [Haemo philus influe nzae Rd]
172135	ATU034 075	ATL8C2 9975:8 19..16 3	nap										g42636 53	37	139	9.3e- 05	(AC006 136) hypoth etical protei n [Arabi dopsis thalia nal]	
172136	ATU034 076	ATL8C2 465:1. .363	nap										g22449 60	37	592	1.6e- 51	(Z9734 0) simila rity to copia- like retrot	

172137	ATU034 077	ATL8S1 98:304 ..1	nap									g29953 84	37.	107	8.9e- 08	(AJ004 810) cytoch rome P450 monoox ygenase [Zea mays]	ranspo son [Arabi dopsis thalia na]
172138	ATU034 078	ATL8S2 6411:5 99..1	nap									g44690 10	37	424		(AL035 602) hypoth etical protei n [Arabi dopsis thalia na]	
172139	ATU034 079	ATL8S2 4749:1 ..317	nap									g28304 5	37	132	0.32	hydrox yproli ne- rich glycop rotein - maize [Zea mays]	
172140	ATU034 080	ATL8C3 6326:1 463..1	nap									g30471 19	37	1057	3.8e- 113	(AF058 919) No defini	

172146	ATU034 086	ATL8S1 3013:1 ..470	nap									g31501 02	37	418	2.7e- 36	dopsis thalia na] (AL023 596) hypoth etical protei n MLCB24 07.14 [Mycob acteri um leprae]
172147	ATU034 087	ATL8C4 410:19 25..49 7	nap									g27958 03	37	367	1.1e- 33	(AC003 674) putati ve beta- 1,3- endogl ucanas e [Arabi dopsis thalia na]
172148	ATU034 088	ATL8C3 3438:3 854..3 348	nap									g19463 64	37	403	2.2e- 40	(U9321 5) lipase isolog [Arabi dopsis thalia na]
172149	ATU034 089	ATL8C1 6281:1 ..717	nap									g31281 85	37	910	4.5e- 75	(AC004 521) unknown

172150	ATU034 090	ATL8C1 9616:3 86..1	nap								g49268 34	37	457	1.1e- 21	(AC004 135) T17H7. 19 [Arabi dopsis thalia na]
172151	ATU034 091	ATL8C3 5719:2 061..1	nap								g30470 86	37	1206	1.8e- 121	(AF058 914) simila r to revers e transc riptas e (Pfam: transc ript f act.hm m, score: 72.31) [Arabi dopsis thalia na]
172152	ATU034 092	ATL8C2 7376:1 225..1	nap								g62972 2	37	583		finger protei n pcpl - potato

172156	ATU034 096	ATL8C2 1148:6 186..6 874	nap							g43887 22	37	532	8.9e- 48	(AC006 413) putati ve centro meric protei n [Arabi dopsis thalia na]
172157	ATU034 097	ATL8C1 0448:5 214..5 754	nap							g44690 08	37	436		(AL035 602) UDP rhamno se-- anthoc yanidi n-3- glucos ide rhamno syltra nsfera se- like protei n [Arabi dopsis thalia na]
172158	ATU034 098	ATL8C1 6734:3 429..5 79	nap							g27958 03	37	395	3.7e- 37	(AC003 674) putati ve beta- 1,3- endogl

172159	ATU034 099	ATL8S2 0124:6 48..1	nap							g35134 51	37	174	6.9e- 17	ucanas e [Arabi dopsis thalia na]
172160	ATU034 100	ATL8C6 795:1. .121	nap							g48369 47	37	121	0.0072	(U7809 0) potass ium channe l regula tor 1 [Rattu s norveg icus]
172161	ATU034 101	ATL8S2 3794:1 ..445	nap						ATL8S2 3794:2 32...42 9	g30238 98	36	170	1.4e- 11	(AC006 085) Putati ve photos ystem II 5 KD protei n [Arabi dopsis thalia na] GLUCOS E/GALA CTOSE TRANSP ORTER [Bruce lla abortu

[illegible]

172170	ATU034 110	ATL8S3 0593:1 ..421	nap										g23926 14	37	407	1.3e- 39	Trna- Guanin e Transg lycosy lase []	[Arabi dopsis thalia na]
172171	ATU034 111	ATL8S3 541:56 0..136	nap										g46783 47	37	125	5.3e- 12	(AL049 659) putati ve protei n [Arabi dopsis thalia na]	
172172	ATU034 112	ATL8C4 0012:1 211..1 428	nap										g34137 17	37	140	3.2e- 12	(AC004 747) unknow n protei n [Arabi dopsis thalia na]	
172173	ATU034 113	ATL8C2 6669:1 ..880	nap										g34026 94	37	956	1.0e- 85	(AC004 697) putati ve Mlo-hi protei n [Arabi dopsis thalia na]	

172174	ATU034 114	ATL8C2 4187:1 464..1 156	nap									g21320 68	37	348	3.4e- 31	thalia nal hypoth etical protei n YOR145 C - yeast (Sacch aromyc es cerevi siae) [Sacch aromyc es cerevi siae] (AC004 077) hypoth etical protei n [Arabi dopsis thalia nal]
172175	ATU034 115	ATL8S1 3547:1 ..681	nap									g31282 31	37	384	2.7e- 34	(AC004 077) hypoth etical protei n [Arabi dopsis thalia nal]
172176	ATU034 116	ATL8S2 6570:5 55..1	nap									g47603 67	37	316		(AF053 463) exopol yphosp hatase ; PPX [Pseud omonas aerugi nosa]
172177	ATU034	ATL8C2	nap									g40493	37	377	2.3e-	(Y0958)

	117	835:13 82..1								99				21	1) FRO2 [Arabi dopsis thalia na]
172178	ATU034 118	ATL8C4 2393:1 ..1616	nap							g39288 62	37	814	5.9e- 68	(AF089 710) diseas e resist ance protei n RPP8 [Arabi dopsis thalia na]	
172179	ATU034 119	ATL8C4 5049:6 43..13 53	nap							g30212 82	37	465	4.4e- 47	(AL022 347) serine /threo nine - like protei n [Arabi dopsis thalia na]	
172180	ATU034 120	ATL8C1 6607:9 20..1	nap							g23520 84	37	1320	2.5e- 58	(U9661 3) serine /threo nine kinase [Arabi dopsis thalia na].	

172181	ATU034 121	ATL8C1 3685:1 97..1	nap							g22136 03	37	96	0.40	(AC000 348) T7N9.2 3 [Arabi dopsis thalia na]
172182	ATU034 122	ATL8C1 6223:4 98..1	nap							g12094 1	37	148	3.8e- 09	GAR1 PROTEI N [Sacch aromyc es cerevi siae]
172183	ATU034 123	ATL8C2 3603:6 44..1	nap							g28466 7	37	105	0.25	neurof ilamen t triple t H1 protei n - rabbit (fragm ent) [Oryct olagus cunicu lus]
172184	ATU034 124	ATL8C4 181:1. .671	nap							g45803 93	37	516	1.2e- 49	(AC007 171) hypoth etical protei n [Arabi dopsis thalia na]

172195	ATU034 135	ATL8S3 0400:3 42..1	nap									g26880 26	37	54	0.0001 3	(AE001 125) membrane fusion protein (mtrC) [Borrellia burgdorferi]	or protein kinase [Arabidopsis thaliana]
172196	ATU034 136	ATL8C4 4824:8 60..12 80	nap									g46783 66	37	576	3.5e- 45	(AJ132 435) GA 2- oxidase [Arabidopsis thaliana]	
172197	ATU034 137	ATL8C1 6394:1 439..1	nap									g44327 98	37	349	3.9e- 36	(AC006 437) hypothetical protein [Arabidopsis thaliana]	
172198	ATU034	ATL8C3	nap									g33865	37	229	3.7e-	(AF078)	

[illegible]

138	590:49 0..1									34					19	934) marine r transp osase [Glyci ne max]
172199	ATU034 139	ATL8C3 0323:5 88..1	nap							g19463 69	37	286	3.3e- 16	(U9321 5) unknown protein [Arabi dopsis thalia na]	2.5e- 17	(S7293 1) T- cell recept or alpha chain consta nt region (c6.1A produc t, T- cell recept or alpha chain- c6.1A fusion protei n=c6.1
172200	ATU034 140	ATL8C2 3278:5 68..1	nap							g63961 3	37	166				

172201	ATU034 141	ATL8C2 4180:1 786..1 399	nap										g29613 50	37	436	1.3e- 45	(AI022 140) aspart ic protei nase like protei n [Arabi dopsis thalia na]	A-TCR C alpha) [Homo sapien s]
172202	ATU034 142	ATL8C1 1979:2 255..1 886	nap										g45038 17	37	89	0.0001 2	follic ular lympho ma varian t transl ocatio n 1 [Homo sapien s]	
172203	ATU034 143	ATL8C4 1868:5 43..15	nap										g45804 69	37	336	7.1e- 29	(AC006 081) putati ve zinc finger protei n	

172204	ATU034 144	ATL8C4 5388:6 58..31 0	nap							g21911 73	37	328	1.2e- 26	[Arabi dopsis thalia na] (AF007 270) contai ns simila rity to DNA polyme rase III, alpha chain (SP:P4 7277) [Arabi dopsis thalia na]
172205	ATU034 145	ATL8C9 956:14 61..1	nap							g42063 06	37	2333	1.5e- 223	(AF049 110) prpol [Zea mays]
172206	ATU034 146	ATL8C2 9297:2 43..1	nap							g32121 85	37	128	5.9e- 11	(U3270 7) H. influe nzae predic ted coding region HI0220 .2 [Haemo philus influe

172207	ATU034 147	ATL8C4 1879:7 23..48	nap									g22135 90	37	395	9.7e- 37	nzae Rd] (AC000 348) T7N9.1 0 [Arabi dopsis thalia na]
172208	ATU034 148	ATL8S2 0733:2 63..1	nap									g33778 35	37	149	2.3e- 09	(AF075 598) contai ns simila rity to Arabid opsis thalia na downy mildew resist ance protei n RPP5 (GB:U9 7106) [Arabi dopsis thalia na]
172209	ATU034 149	ATL8C2 3458:1 ..1392	nap									g49268 20	37	168	5.3e- 13	(AC004 135) T17H7. 5 [Arabi dopsis thalia

172212	ATU034 152	ATL8C3 3176:5 42..1	nap							g36953 96	37	695	2.6e- 41	(AF096 372) contai ns simila rity to Arabid opsis thalia na retrot ranspo son Athila (GB:X8 1801) [Arabi dopsis thalia na]
172213	ATU034 153	ATL8C4 5042:6 18..1	nap							g32128 70	37	705	3.1e- 70	(AC004 005) putati ve N- myrist oyltra nsfera se [Arabi dopsis thalia na]
172214	ATU034 154	ATL8C1 2036:1 ..912	nap							g30467 11	37	103	1.0e- 07	(AJ005 334) replac tion factor C/acti vator

172215	ATU034 155	ATL8C3 9670:7 95..44 7	nap									941909 52	37	96	3.9e- 07	(AB022 689) simila r to hsr203 J [Lycop ersico n escule ntum]	1 subuni t [Cicer arieti num]
172216	ATU034 156	ATL8S1 1693:3 4..555	nap									g27389 12	37	106	1.5e- 09	(AF020 388) flavoh emoglo bin [Salmo nella typhim urium]	
172217	ATU034 157	ATL8C2 6604:1 ..455	nap									g45811 52	37	345	5.4e- 33	(AC006 919) hypoth etical protei n [Arabi dopsis thalia na]	
172218	ATU034 158	ATL8C4 4577:1 013..1 543	nap									g49143 30	37	368	7.6e- 38	(AC005 489) F14N23 .16	

172219	ATU034 159	ATL8C3 8128:1 ..1134	nap					ATL8C3 8128:6 65..11 34	0.99	g34260 39	36	482	5.1e- 47	[Arabi dopsis thalia na] (AC005 168) unknown n protei n [Arabi dopsis thalia na]
172220	ATU034 160	ATL8C2 0435:9 83..52 9	nap					ATL8C2 0435:9 23..52 9	0.99	g40380 45	36	204	1.4e- 19	(AC005 936) putati ve DNA- bindin g protei n [Arabi dopsis thalia na]
172221	ATU034 161	ATL8S2 1988:1 ..455	nap					ATL8S2 1988:1 45..43 2	0.98	g11761 27	36	475	1.0e- 43	HYPOTH ETICAL 43.5 KD PROTEI N IN EBGC- UXAA INTERG ENIC REGION (O414) [Esche

172222	ATU034 162	ATL8C6 935:17 91..1	nap				ATL8C6 935:17 41..23 0	0.98	g41765 30, g43221 07	36, 31	141, 188	2.9e- 07, 2.9e- 07	richia coli] (AL035 263) putati ve conden sin subuni t [Schiz osacch aromyc es pombel ; (AF072 717) pEg7 [Xenop us laevis]
172223	ATU034 163	ATL8C7 32:99. .3099	nap				ATL8C7 32:99. .2236	0.97	g42638 31	36	2143	8.9e- 230	(AC006 067) putati ve revers e transc riptas e [Arabi dopsis thalia na]
172224	ATU034 164	ATL8S1 6387:5 42..1	nap				ATL8S1 6387:3 80..48	0.97	g25222 33	36	212	1.6e- 18	(AB007 847) 3- ketost

172225	ATU034 165	ATL8C4 0368:5 87..77 2	nap				ATL8C4 0368:5 87..73 8	0.97	g45103 86	36	261	4.6e- 22	eroid- delta1 - dehydr ogenas e [Rhodo coccus rhodoc hrous] (AC007 017) unknow n protei n [Arabi dopsis thalia na]
172226	ATU034 166	ATL8C1 242:13 32..17 7	nap				ATL8C1 242:74 5..192	0.97	g10762 91	36	241	2.1e- 20	amino acid transp orter AAT1 - Arabid opsis thalia na [Arabi dopsis thalia na]
172227	ATU034 167	ATL8C4 5403:1 041..1	nap				ATL8C4 5403:8 00..74	0.97	g25860 83	36	584	9.4e- 58	(U7272 5) recept or kinase -like protei

172228	ATU034 168	ATL8C2 3998:1 451..1	nap					ATL8C2 3998:1 370..4 5	0.96	g34026 82	36	281	1.8e- 24	n [Oryza longis tamina ta] (AC004 697) unknow n protei n [Arabi dopsis thalia na]
172229	ATU034 169	ATL8S3 0414:1 ..642	nap					ATL8S3 0414:8 2..631	0.95	g30369 01, g12139 5	36, 35	191, 131	1.4e- 16, 1.4e- 05	(AJ222 715) DapA [Sinor hizobi um melilo til; GLUTAM INE TRANSP ORT SYSTEM PERMEA SE PROTEI N GLNP [Esche richia coli]
172230	ATU034 170	ATL8C3 9160:2 334..1 406	nap					ATL8C3 9160:2 326..1 406	0.95	g43250 41	36	869	7.4e- 81	(AF117 339) FtsH- like protei

172231	ATU034 171	ATL8C3 4649:1 039..1	nap				ATL8C3 4649:8 23..27 0	0.95	g22449 65	36	722	1.3e- 74	n Pftf precu sor [Nicot iana tabacu m] (Z9734 0) unname d protei n produc t [Arabi dopsis thalia na]
172232	ATU034 172	ATL8S7 035:21 1..1	nap				ATL8S7 035:19 0..121	0.95	g28326 22	36	205	4.1e- 17	(AL021 711) cyclic phosph odiester - like protei n [Arabi dopsis thalia na]
172233	ATU034 173	ATL8C3 0952:1 902..1	nap				ATL8C3 0952:1 638..2 10	0.94	g39918 3	36	592	1.2e- 44	PHOSPH OENOLP YRUVAT E CARBOX YLASE (PEPCA SE)

172234	ATU034 174	ATL8C1 1380:9 18..1	nap				ATL8C1 1380:5 82..18 2	0.94	g42622 22	36	785	1.9e- 82	[Medic ago sativa] (AC006 200) putati ve RNA helica se A, 3' partia l [Arabi dopsis thalia na]
172235	ATU034 175	ATL8C3 2558:1 ..853	nap				ATL8C3 2558:1 12..56 8	0.94	g29146 97	36	577	1.3e- 49	(AC003 974) hypoth etical protei n [Arabi dopsis thalia na]
172236	ATU034 176	ATL8S1 0940:1 ..521	nap				ATL8S1 0940:3 9..521	0.93	g22909 90	36	70	0.0054	(AF006 000) Brg1 [Borde tella pertus sis]
172237	ATU034 177	ATL8C4 7581:7 13..1	nap				ATL8C4 7581:5 74..21 7	0.93	g45672 34	36	555	1.4e- 61	(AC007 119) putati ve dihydr ofolat

172238	ATU034 178	ATL8S2 122:48 0..1	nap						0.93	g21601 39	36	369	1.8e- 17	(AC000 375) No defini tion line found [Arabi dopsis thalia nal]
172239	ATU034 179	ATL8C4 6130:1 168..8 09	nap						0.93	g14029 02	36	364	1.2e- 30	(X9832 3) peroxi dase [Arabi dopsis thalia nal]
172240	ATU034 180	ATL8C4 6207:1 827..1	nap						0.93	g48369 30	36	1863	6.9e- 158	(AC006 085) Hypoth etical protei n [Arabi dopsis thalia

172241	ATU034 181	ATL8C3 3980:5 63..22	nap				ATL8C3 3980:4 19..22	0.93	g35823 20	36	311		na] (AC005 496) hypoth etical protei n [Arabi dopsis thalia na]
172242	ATU034 182	ATL8C3 1083:3 769..2 088	nap				ATL8C3 1083:2 995..2 839	0.92	g48504 12	36	489	7.5e- 41	(AC007 288) putati ve MuDR MURA transp osase [Arabi dopsis thalia na]
172243	ATU034 183	ATL8C8 796:89 1..546	nap				ATL8C8 796:89 1..559	0.92	g38941 60	36	76	2.5e- 05	(AC005 312) simila r to phloem - specif ic lectin [Arabi dopsis thalia na]
172244	ATU034 184	ATL8C4 3300:8 77..1	nap				ATL8C4 3300:5 41..42	0.92	g30565 92	36	1208		(AC004 255) T1F9.1 3

172245	ATU034 185	ATL8C4 7499:3 764..3 43	nap					ATL8C4 7499:1 386..3 43	0.91	g99721	36	457	3.1e- 44	[Arabi dopsis thalia na] retrov irus- relate d polypr oteins - Arabid opsis thalia na retrov ranspo son Ta1-3 [Arabi dopsis thalia na]
172246	ATU034 186	ATL8C4 2589:8 43..62	nap					ATL8C4 2589:6 59..62	0.91	g29593 24	36	631	1.9e- 53	(Y1522 4) Import in alpha- like protei n [Arabi dopsis thalia na]
172247	ATU034 187	ATL8S2 5771:1 ..555	nap					ATL8S2 5771:1 58..51 5	0.91	g72927 3	36	627	6.6e- 65	CYPRO4 PROTEI N [Cynar a]

172248	ATU034 188	ATL8C2 2243:6 87..18 58	nap				ATL8C2 2243:7 82..17 89	0.91		g25586 64	36	491	2.0e- 37	cardun culus] (AC002 354) hypoth etical protei n [Arabi dopsis thalia na]
172249	ATU034 189	ATL8C2 5216:1 ..1605	nap				ATL8C2 5216:1 58..16 05	0.90		g45126 22	36	91	1.0e- 05	(AC004 793) F28K20 .11 [Arabi dopsis thalia na]
172250	ATU034 190	ATL8C5 850:90 4..437	nap				ATL8C5 850:81 8..437	0.90		g31281 68	36	228		(AC004 521) putati ve carbox yl- termin al peptid ase [Arabi dopsis thalia na]
172251	ATU034 191	ATL8C1 0887:5 41..1	nap				ATL8C1 0887:5 30..14 7	0.90		g45443 98	36	548	9.8e- 57	(AC007 047) hypoth etical protei n

172252	ATU034 192	ATL8C1 6234:1 346..8 44	nap					ATL8C1 6234:1 346..8 44	0.90		g45811 42	36	114	0.41	[Arabi dopsis thalia na] (AC006 919) unknow n protei n [Arabi dopsis thalia na]
172253	ATU034 193	ATL8C2 5906:3 44..67 5	nap					ATL8C2 5906:3 44..54 0	0.90		g46893 66	36	127	0.020	(AF134 155) RING finger protei n [Arabi dopsis thalia na]
172254	ATU034 194	ATL8C1 877:85 8..244	nap					ATL8C1 877:73 5..249	0.90		g45314 44	36	720	4.5e- 67	(AC006 224) putati ve protei n kinase [Arabi dopsis thalia na]
172255	ATU034 195	ATL8C1 8269:7 93..17 11	nap					ATL8C1 8269:1 309..1 152	0.89		g32528 07	36	303	4.6e- 14	(AC004 705) hypoth etical protei

172256	ATU034 196	ATL8C2 7970:4 52..1	nap					ATL8C2 7970:4 52..22 5	0.89	g13700 48	36	65	(X9560 8) mec-8 [Caeno rhabdi tis elegan s]	n [Arabi dopsis thalia na]
172257	ATU034 197	ATL8C2 1037:1 ..661	nap					ATL8C2 1037:2 ..658	0.89	g40468 8	36	490	1.5e- 48	(I1907 4) cytoch rome P450 [Catha ranthu s roseus]
172258	ATU034 198	ATL8C3 7397:1 445..7 30	nap					ATL8C3 7397:1 293..7 30	0.89	g34027 13	36	388	(AC004 261) hypoth etical protei n [Arabi dopsis thalia na]	(AC004 261) hypoth etical protei n [Arabi dopsis thalia na]
172259	ATU034 199	ATL8C4 6910:1 ..791	nap					ATL8C4 6910:1 17..76 3	0.89	g22752 01	36	433	5.2e- 39	(AC002 337) unknow n protei n [Arabi dopsis thalia na]

172260	ATU034 200	ATL8C4 6424:1 288...9 1	nap					ATL8C4 6424:1 288...9 1	0.89	g40380 35	36	346	1.2e- 30	(AC005 936) putati ve DNA- bindin g protei n [Arabi dopsis thalia na]
172261	ATU034 201	ATL8C2 8069:1 ..1619	nap					ATL8C2 8069:3 71..15 05	0.89	g13614 0	36	308	5.1e- 32	PUTATI VE AC9 TRANSP OSASE []
172262	ATU034 202	ATL8C2 1123:6 67..1	nap					ATL8C2 1123:6 20..12	0.88	g11452 64	36	441	5.0e- 41	(U3700 8) KefC [Myxoc occus xanthu s]
172263	ATU034 203	ATL8S5 554:1. .423	nap					ATL8S5 554:21 6..109	0.88	g48503 83	36	622	3.3e- 60	(AC007 357) Contai ns simila rity to []
172264	ATU034 204	ATL8C2 4594:2 084..1	nap					ATL8C2 4594:2 083..1 03	0.88	g40564 82, g15146 43	36, 35	1031, 718	9.8e- 71, 1.0e- 50	(AC005 896) putati ve ABC transp

172265	ATU034 205	ATL8C2 8169:9 21..1	nap						0.87	931324 78	36	934	5.4e- 89	orter [Arabi dopsis thalia nal; (Z7052 4) PDR5- like ABC transp orter [Spiro dela polyrr hizal] (AC003 096) bZIP- like protei n [Arabi dopsis thalia nal]
172266	ATU034 206	ATL8S1 0922:4 57..1	nap						0.87	g58668 5	36	258	5.6e- 23	HYPOTH ETICAL METABO LITE TRANSP ORT PROTEI N IN TREF- KDGK INTERG ENIC REGION (O440)

172267	ATU034 207	ATL8S1 5775:5 64...38	nap					ATL8S1 5775:3 79...38	0.87	g30235 18	36	42	0.0001 1	[Esche richia coli] CYTOSK ELETON - ASSOCI ATED PROTEI N CKAPI (TUBUL IN FOLDIN G COFACT OR B) []
172268	ATU034 208	ATL8C3 8952:7 69...1	nap					ATL8C3 8952:7 15...18	0.87	g48742 75	36	523	3.1e- 46	(AC007 354) Simila r to gb L26 291 clathr in- associ ated protei n unc- 101 from Caenor habdit is elegan s and is a member of the

172269	ATU034 209	ATL8C3 1212:7 6..184 3	nap							ATL8C3 1212:7 6..177 3	0.86	g26421 65	36	267	8.7e- 24	PF1009 28 Adapte r comple xes medium subuni t family . [Arabi dopsis thalia na]
172270	ATU034 210	ATL8C2 1560:6 49..1	nap							ATL8C2 1560:2 97..8	0.86	g33353 46	36	648	7.2e- 67	(AC003 000) hypoth etical protei n [Arabi dopsis thalia na] (AC004 512) Contai ns simila rity to TMV resist ance protei n N gb U15 605 from Nictia

172271	ATU034 211	ATL8C1 6771:3 86..1	nap					ATL8C1 6771:3 86..32	0.86	g47739 03	36	338	1.3e- 32	na glutin osa. [Arabi dopsis thalia na] (AF074 021) putati ve transp oson protei n [Arabi dopsis thalia na]
172272	ATU034 212	ATL8C1 264:22 4..775	nap					ATL8C1 264:34 1..775	0.86	g47739 10	36	179	4.9e- 16	(AF147 259) No defini tion line found [Arabi dopsis thalia na]
172273	ATU034 213	ATL8S3 198:41 9..1	nap					ATL8S3 198:41 9..32	0.86	g45868 01	36	193	2.6e- 16	(AB015 222) NtcycD 3-1 [Nicot iana tabacu m]
172274	ATU034 214	ATL8C2 8091:6	nap					ATL8C2 8091:5	0.85	g22621 77	36	349	3.4e- 28	(AC002 329)

172275	ATU034 215	99..1	ATL8C4 8854:1 466..8 50	nap					34..54	0.85	g42637 81	36	734	3.1e- 62	(AC006 068) putati ve membra ne transp ort protei n [Arabi dopsis thalia na]
172276	ATU034 216	ATL8C4 489:20 52..1	nap						ATL8C4 489:19 58..32	0.85	g48503 96	36	704	3.7e- 33	(AC007 357) F3F19. 15 [Arabi dopsis thalia na]
172277	ATU034 217	ATL8C4 6256:3 088..4 214	nap						ATL8C4 6256:3 088..4 002	0.85	g31526 12	36	920	3.4e- 61	(AC004 482) hypoth etical protei n

172278	ATU034 218	ATL8C2 5222:2 856..8 0	nap					ATL8C2 5222:2 608..3 17	0.85	g29838 19	36	244	1.7e- 16	[Arabi dopsis thalia na] (AE000 739) valyl- tRNA synthe tase [Aquif ex aeolic us]
172279	ATU034 219	ATL8S1 4219:5 98..1	nap					ATL8S1 4219:5 06..11 6	0.84	g24432 38, g28967 07	36, 34	147, 110	6.0e- 13, 3.0e- 06	(D8641 7) Yf1P [Bacil lus subtil is]; (AL021 897) echA8 [Mycob acteri um tuberc ulosis]
172280	ATU034 220	ATL8C4 0300:1 ..1199	nap					ATL8C4 0300:3 7..113 5	0.84	g16849 13	36	944	2.2e- 84	(U7788 8) recept or- like protei n kinase [Ipomo ea

172281	ATU034 221	ATL8C2 0751:1 569..2 27	nap				ATL8C2 0751:1 068..2 27	0.84	937460 69	36	1256	2.8e- 125	nil] (AC005 311) putati ve revers e transc riptas e [Arabi dopsis thalia na]
172282	ATU034 222	ATL8S1 501:1. .526	nap				ATL8S1 501:60 ..470	0.83	933341 42	36	790	7.2e- 70	CENTRO MERE/M ICROTU BULE BINDIN G PROTEI N CBF5 (CENTR OMERE- BINDIN G FACTOR 5) (NUCLE OLAR PROTEI N CBF5) [Sarto rya fumiga ta]
172283	ATU034 223	ATL8C1 5342:1 ..1318	nap				ATL8C1 5342:4 13..12	0.83	945859 28	36	916	3.7e- 67	(AC007 211) hypoth

172287	ATU034 227	ATL8C4 6844:1 ..1286	nap					ATL8C4 6844:1 56..12 23	0.83	g33193 60	36	956	2.9e- 61	[Arabi dopsis thalia na] (AF077 408) contai ns simila rity to Vicia faba retrot ranspo son- like gene (GB:AB 007467) [Arabi dopsis thalia na]
172288	ATU034 228	ATL8S8 362:1. ..621	nap					ATL8S8 362:49 ..601	0.81	g26657 11	36	176	1.8e- 13	(AF035 413) AgaG [Agrob acteri um tumefa ciens]
172289	ATU034 229	ATL8S1 7922:1 ..529	nap					ATL8S1 7922:5 7..522	0.81	g17875 98	36	190	3.6e- 18	(AE000 231) orf, hypoth etical protei n

172290	ATU034 230	ATL8C5 937:45 0..1	nap						0.81, 0.90	945672 08	36	205	[Esche richia colil (AC007 168) unknow n protei n [Arabi dopsis thalia na]
172291	ATU034 231	ATL8S2 3681:1 ..574	nap						0.80	g39137 92	36	244	2.4e- 21 GLUTAM ATE-- CYSTEI NE LIGASE PRECUR SOR (GAMMA - GLUTAM YL CYST EINE SYNTHE TASE) (GAMMA -ECS) (GCS) [Brass ica juncea]
172292	ATU034 232	ATL8C7 168:1. .1121	nap						0.80	940192 75	36	165	(AF083 424) orf 48 [Ateli ne herpes

172293	ATU034 233	ATL8C3 793:78 2..328 5	nap				ATL8C3 793:78 2..312 6	0.80	g30154 88	36	399	4.2e- 42	virus 3] (U5847 4) recept or- like protei n kinase [Lycop ersico n escule ntum]
172294	ATU034 234	ATL8C1 8559:1 394..1	nap				ATL8C1 8559:1 309..2 27	0.79	g34510 61	36	1027	3.3e- 112	(AL031 326) putati ve protei n [Arabi dopsis thalia na]
172295	ATU034 235	ATL8C3 5075:1 358..4 12	nap				ATL8C3 5075:1 347..4 12	0.78	g48503 98	36	440	3.2e- 46	(AC007 357) Strong simila rity to []]
172296	ATU034 236	ATL8C6 756:1. .511	nap				ATL8C6 756:47 7..284	0.78	g49268 20	36	134	1.6e- 08	(AC004 135) T17H7. 5 [Arabi dopsis thalia na]
172297	ATU034	ATL8C3	nap				ATL8C3	0.78	g45389	36	488	1.1e-	(AL049

172298	237	6280:1 297..1					6280:6 65..33	39	48	483) Col-0 casein kinase I-like protei n [Arabi dopsis thalia nal]
	ATU034 238	ATL8C3 0777:1 267..4 67	nap				ATL8C3 0777:1 187..6 82	0.78	710	3.7e- 69
								g24594 35	36	(AC002 332) putati ve serine carbox ypepti dase [Arabi dopsis thalia nal]
172299	ATU034 239	ATL8S2 9313:4 67..1	nap				ATL8S2 9313:1 25..81	0.77	191	1.1e- 16
								g29832 17	36	(AE000 697) N- ethyla mmelin e chloro hydrol ase [Aquif ex aeolic us]
172300	ATU034 240	ATL8C3 7726:1 978..2 11	nap				ATL8C3 7726:1 667..2 11	0.77	1358	1.5e- 124
								g34510 76	36	(AL031 326) putati ve

172301	ATU034 241	ATL8S2 2827:1 61..51 0	nap					ATL8S2 2827:1 61..46 3	0.76		g47419 23	36	222	1.4e- 25	proteol n [Arabi dopsis thalia na]
172302	ATU034 242	ATL8S2 3564:3 53..1	nap					ATL8S2 3564:3 53..25 2	0.76		g11697 52	36	127	1.9e- 09	CELL DIVISI ON ATP- BINDIN G PROTEI N FTSE [Haemo philus influe nzae Rd]
172303	ATU034 243	ATL8C1 6694:1 092..1	nap					ATL8C1 6694:1 092..2 5	0.76		g47738 81	36	1651	1.1e- 149	(AF076 243) putati ve transp oson protei n [Arabi dopsis thalia na]
172304	ATU034 244	ATL8C4 2454:3	nap					ATL8C4 2454:3	0.76		g47739 03	36	24	0.017	(AF074 021)

		210..1							210..8 5								putative transposon protein [Arabidopsis thaliana]
172305	ATU034 245	ATL8C6 378:1. .668	nap						ATL8C6 378:82 ..609	0.76	g45875 50	36	325	8.5e- 33	(AC006 577) EST gb R64 848 comes from this gene. [Arabidopsis thaliana]		
172306	ATU034 246	ATL8C5 582:17 03..1	nap						ATL8C5 582:16 99..33 7	0.76	g21312 77	36	145	9.1e- 06	HFM1 protein - yeast (Saccharo- myces cerevisiae) [Saccharo- myces cerevisiae]		
172307	ATU034 247	ATL8C1 2364:9 96..1	nap						ATL8C1 2364:6 86..24	0.76	g43143 70	36	599	1.4e- 53	(AC006 340) hypoth		

172311	ATU034 251	ATL8C4 1401:6 64..34	nap				ATL8C4 1401:6 64..34	0.74	g12353 0	36	76	0.56	HISTID INE- RICH GLYCOP ROTEIN PRECUR SOR [Plasm odium sp.]
172312	ATU034 252	ATL8S1 8099:4 29..1	nap				ATL8S1 8099:4 29..25	0.74	g15192 87	36	168	8.2e- 12	(U6618 6) LemA [Liste ria monocy togene s]
172313	ATU034 253	ATL8S1 6347:1 ..527	nap				ATL8S1 6347:1 69..51 9	0.73	g33554 86	36	376	4.8e- 37	(AC004 218) unknow n protei n [Arabi dopsis thalia na]
172314	ATU034 254	ATL8C4 8530:1 ..1553	nap				ATL8C4 8530:1 99..12 57	0.72	g29613 52	36	191	6.3e- 13	(AL022 140) putati ve protei n [Arabi dopsis thalia na]
172315	ATU034	ATL8C2	nap				ATL8C2	0.72	g44327	36	528	2.6e-	(AC006

172316	255	7972:1 ..1647					7972:2 82..63 6	98	45	437) hypoth etical protein [Arabi dopsis thalia na]
	ATU034 256	ATL8C3 292:24 83..1	nap				ATL8C3 292:23 97..95 9	0.72	298	(AC005 897) hypoth etical protein [Arabi dopsis thalia na]
172317	257	ATL8C4 4487:1 37..18 28	nap				ATL8C4 4487:1 53..17 19	0.72	209	(AF073 996) myotub ularin [Mus muscul us]
172318	258	ATL8C2 5588:1 353..2 33	nap				ATL8C2 5588:1 269..2 33	0.72	914	(AC004 260) Putati ve protein kinase [Arabi dopsis thalia na]
172319	259	ATL8C3 4251:1 003..1	nap				ATL8C3 4251:7 49..27	0.71	287	(AC001 229) F5I14.

172320	ATU034 260	ATL8C2 3492:9 94..1	nap					ATL8C2 3492:4 19..31 1	0.71	g42046 95	36	545	1.3e- 39	(AF117 062) putati ve inosit ol polyph osphat e 5- phosph atase At5P1 [Arabi dopsis thalia na]
172321	ATU034 261	ATL8C2 5845:1 131..1	nap					ATL8C2 5845:1 131..9 1	0.71	g45899 56	36	366	3.3e- 35	(AC007 169) putati ve endonu clease III [Arabi dopsis thalia na]
172322	ATU034 262	ATL8S2 8437:1 ..764	nap					ATL8S2 8437:6 1..715	0.70	g43245 97	36	340	1.5e- 23	(AF106 324) sodium proton exchan ger Nhxl [Arabi

172323	ATU034 263	ATL8C7 489:13 47..12 8	nap					ATL8C7 489:13 47..22 5	0.70	g22135 90, g14953 66	36, 34	197, 146	1.7e- 15, 1.3e- 07	dopsis thalia nal (AC000 348) T7N9.1 0 [Arabi dopsis thalia nal; (Z6937 0) nitrit e transp orter [Cucum is sativu s]
172324	ATU034 264	ATL8C3 2156:9 5..124 1	nap					ATL8C3 2156:9 5..121 5	0.70	g41153 59	36	520	2.2e- 50	(AC005 957) putati ve diseas e resist ance protei n [Arabi dopsis thalia nal]
172325	ATU034 265	ATL8C2 2414:2 038..1	nap					ATL8C2 2414:1 982..3	0.70	g43780 66	36	1746	2.2e- 170	(AF098 806) polypr oteine [Sorgh

172326	ATU034 266	ATL8S9 284:48 5..151	nap				ATL8S9 284:35 7..154	0.70	g48952 40	36	295	1.4e- 30	um bicolor] (AC007 659) unknown n protei n [Arabi dopsis thalia nal]
172327	ATU034 267	ATL8S9 045:28 0..459	nap				ATL8S9 045:28 0..459	0.70	g45859 30	36	294	1.8e- 28	(AC007 211) hypoth etical protei n [Arabi dopsis thalia nal]
172328	ATU034 268	ATL8C3 5279:1 ..498	nap				ATL8C3 5279:2 60..49 8	0.69	g38920 51	36	235	8.7e- 29	(AC002 330) predic ted NADH dehydr ogenas e 24 kD subuni t [Arabi dopsis thalia nal]
172329	ATU034 269	ATL8C3 5264:5	nap				ATL8C3 5264:5	0.69	g45876 02	36	1407	2.6e- 140	(AC006 951)

172330	ATU034 270	10..22 67	nap	ATL8C9 780:18 7..736	ATL8C9 780:37 7..664	0.69	g21911 36	36	559	3.9e- 51	(AF007 269) Simila r to UTP- Glucos e Glucos yltran sferas e; coded for by A. thalia na cDNA T46230 ; coded for by A. thalia na cDNA H76538 ;
											putati ve retrot ranspo son hopsco tch polypr otein [Arabi dopsis thalia na]

172331	ATU034 271	ATL8C4 0113:6 15..10 67	nap				ATL8C4 0113:6 15..93 7	0.69	g31422 93	36	666	1.7e- 63	(AC002 411) Contai ns simila rity to myosin IB heavy chain gb X70 400 from Gallus gallus [Arabi dopsis thalia na]
172332	ATU034 272	ATL8C2 661:88 9..1	nap				ATL8C2 661:81 8..305	0.68	g16806 57	36	334	2.0e- 24	(U3429 0) BCH2 [Horde um vulgar e]
172333	ATU034	ATL8C4	nap				ATL8C4	0.68	g44163	36	1100	1.9e-	(AF105

172340	ATU034 280	ATL8C3 687:84 ..1235	nap						ATL8C3 687:84 ..1235	0.65	g49143 64	36	334	1.8e- 32	(AC007 289) hypo- thetical protein [Arabi dopsis thalia na]	ve squal- ene syntha- se [Arabi dopsis thalia na]
172341	ATU034 281	ATL8C4 6057:4 70..33 78	nap						ATL8C4 6057:4 70..32 34	0.64	g47738 92	36	343	1.1e- 20	(AF076 243) hypo- thetical protein [Arabi dopsis thalia na]	(AF076 243) hypo- thetical protein [Arabi dopsis thalia na]
172342	ATU034 282	ATL8C9 525:22 00..1	nap						ATL8C9 525:20 73..76 1	0.64	g45859 14	36	871	6.1e- 90	(AC006 298) putati- ve MuDR MURA transp- osase [Arabi dopsis thalia na]	(AC006 298) putati- ve MuDR MURA transp- osase [Arabi dopsis thalia na]

[illegible]

172343	ATU034 283	ATL8C2 6277:4 30..88	nap				ATL8C2 6277:4 18..21 7	0.64	g33778 53	36	344	2.4e- 26	nal (AF076 274) No defini tion line found [Arabi dopsis thalia nal
172344	ATU034 284	ATL8S2 5714:4 87..1	nap				ATL8S2 5714:2 65..39	0.64	g39132 95	36	283	1.8e- 23	CAFFEI C ACID 3-O- METHYL TRANSF ERASE (S- ADENOS YSL-L- METHIO NINE:C AFFEIC ACID 3-O- METHYL TRANSF ERASE) (COMT) [Prunu s dulcis ,
172345	ATU034 285	ATL8C2 6606:1 362..1	nap				ATL8C2 6606:1 195..3 27	0.64	g46789 47	36	320	4.0e- 26	(AL049 711) putati ve protei n

172346	ATU034 286	ATL8C3 6292:1 433..1 70	nap					ATL8C3 6292:1 366..1 70	0.63	g29613 49	36	1195	1.8e- 121	[Arabi dopsis thalia na] (AL022 140) LTR retrot ranspo son like protei n [Arabi dopsis thalia na]
172347	ATU034 287	ATL8C2 3885:1 ..2177	nap					ATL8C2 3885:3 50..21 59	0.63	g41153 62, g46894 52, g41153 61	36, 32, 31	917, 91, 460	1.1e- 86, 0.037, 2.1e- 50	[AC005 957) hypoth etical protei n [Arabi dopsis thalia na]; (AC006 267) putati ve transp oson protei n [Arabi dopsis thalia na]; (AC005

172348	ATU034 288	ATL8C1 3594:2 937..1	nap					ATL8C1 3594:2 541..6 6	0.63		g42636 58	36	378	3.9e- 35	957) hypoth etical protei n. [Arabi dopsis thalia na]
172349	ATU034 289	ATL8C3 8580:5 19..1	nap					ATL8C3 8580:4 47..22	0.62		g10016 31	36	235	2.9e- 18	(D6400 2) integr al membra ne protei n [Synec hocyst is sp.]
172350	ATU034 290	ATL8C4 3445:1 531..8 80	nap					ATL8C4 3445:1 531..1 018	0.62		g45672 96	36	783		(AC006 918) putati ve Athila retroeo lement ORF1 protei

172351	ATU034 291	ATL8S7 657:1. .559	nap					ATL8S7 657:93 ..489	0.62	g25296 83	36	877	2.1e- 77	n [Arabi dopsis thalia na] (AC002 535) unknow n protei n [Arabi dopsis thalia na]
172352	ATU034 292	ATL8C9 119:90 6..542	nap					ATL8C9 119:83 2..612	0.62	g44903 00	36	570		(AL035 678) putati ve protei n [Arabi dopsis thalia na]
172353	ATU034 293	ATL8C1 9225:1 ..1984	nap					ATL8C1 9225:2 74..18 31	0.62	g45220 05	36	1043	1.0e- 96	(AC007 069) putati ve revers e transc riptas e [Arabi dopsis thalia na]
172354	ATU034 294	ATL8S1 8465:1	nap					ATL8S1 8465:1	0.62	g48369 41	36	196	3.1e- 21	(AC006 085)

172365	ATU034 305	ATL8C4 4075:1 ..879	nap					ATL8C4 4075:1 96..87 9	0.59	g39351 87	36	787	2.1e- 77	[Arabi dopsis thalia na]
172366	ATU034 306	ATL8S5 193:1. ..536	nap					ATL8S5 193:40 ..405	0.59	g17309 03	36	67	9.3e- 05	(AC004 557) F17L21 .30 [Arabi dopsis thalia na]
172367	ATU034 307	ATL8S3 0282:1 ..533	nap					ATL8S3 0282:1 93..59	0.59	g39151 40	36	310	9.1e- 28	ISOTRI CHODER MIN C- 15 HYDROX YLASE (CYTOC HROME P450 65A1) [Fusar ium sporot richio ides]
172368	ATU034	ATL8C3	nap					ATL8C3	0.59	g38314	36	430	1.3e-	(AC005

172369	308	8641:1 ..527				8641:6 7..187	38			22	819)
	ATU034 309	ATL8C4 9660:1 420..3 063	nap			ATL8C4 9660:1 766..3 063	0.59	g44067 98	36	1815	(AC006 304) putati ve helica se [Arabi dopsis thalia na]
172370	ATU034 310	ATL8C2 2424:6 45..1	nap			ATL8C2 2424:6 45..43	0.58	g36458 98	36	1043	(U6840 8) in- frame stop codon; possib ly a post- transp ositio n mutati on [Zea mays]
172371	ATU034 311	ATL8C3 200:1. .693	nap			ATL8C3 200:65 ..587	0.58	g21296 36	36	229	lipase - Arabid opsis thalia na

172372	ATU034 312	ATL8C4 2252:6 88..1	nap				ATL8C4 2252:6 88..35	0.57	g28326 27	36	478	1.1e- 34	[Arabi dopsis thalia na] (AL021 711) xylogl ucan endo- transg lycosy lase - like protei n [Arabi dopsis thalia na]
172373	ATU034 313	ATL8C4 2891:5 71..11 9	nap				ATL8C4 2891:4 53..11 9	0.57	g45443 98	36	704	6.9e- 65	(AC007 047) hypoth etical protei n [Arabi dopsis thalia na]
172374	ATU034 314	ATL8C3 1988:5 97..28 4	nap				ATL8C3 1988:5 97..28 4	0.57	g30687 16	36	361	3.2e- 23	(AF049 236) unknow n [Arabi dopsis thalia na]
172375	ATU034 315	ATL8C4 3931:1 ..675	nap				ATL8C4 3931:7 2..666	0.57	g31842 79	36	395		(AC004 136) hypoth

172376	ATU034 316	ATL8C4 9171:1 ..540	nap					ATL8C4 9171:1 5..516	0.57	g11729 08	36	88	9.7e- 08	PUTATI VE MITOCH ONDRIA L PEPTID E CHAIN RELEASE E FACTOR PRECUR SOR [Schiz osacch aromyc es pombe]	etical protei n [Arabi dopsis thalia na]
172377	ATU034 317	ATL8S2 9961:4 21..1	nap					ATL8S2 9961:4 20..24	0.56	g18390 05	36	362	4.0e- 16	(Z8598 2) argJ [Mycob acteri um tuberc ulosis]	
172378	ATU034 318	ATL8C1 6407:1 303..1 04	nap					ATL8C1 6407:1 122..1 12	0.56	g40637 59	36	604	4.6e- 48	(AC005 561) hypoth etical protei n	

172379	ATU034 319	ATL8C4 3623:2 153..1 499	nap					ATL8C4 3623:1 915..1 563	0.55			g35401 99	36	707		[Arabi dopsis thalia na] (AC004 260) Putati ve monosa cchari de transp ort protei n [Arabi dopsis thalia na]
172380	ATU034 320	ATL8S7 591:44 5..1	nap					ATL8S7 591:44 5..271	0.54			g25418 74	36	459	4.7e- 40	(AB007 994) NADP- linked isocit rate dehydr ogenas e [Candi da tropic alis]
172381	ATU034 321	ATL8C4 8406:1 410..1 22	nap					ATL8C4 8406:1 227..1 22	0.54			g10763 34	36	404	1.8e- 17	hypoth etical protei n HYP1 - Arabid opsis thalia

172385	ATU034 325	ATL8C3 8399:1 455..1	nap						ATL8C3 8399:1 140..6 1	0.53		g25586 56	36	2292	3.0e- 231	(AC002 354) No defini tion line found [Arabi dopsis thalia na]
172386	ATU034 326	ATL8C2 6495:1 074..1	nap						ATL8C2 6495:6 28..17 9	0.53		g23427 27	36	397	1.2e- 40	(AC002 341) hypoth etical protein [Arabi dopsis thalia na]
172387	ATU034 327	ATL8C2 7001:1 935..9 37	nap						ATL8C2 7001:1 858..9 37	0.52		g21601 80	36	648	6.2e- 51	(AC000 132) No defini tion line found [Arabi

172388	ATU034 328	ATL8C1 9209:2 289..1 157	nap					ATL8C1 9209:2 289..1 157	0.51	g37905 81	36	80	6.2e- 05	dopsis thalia nal (AF079 179) RING- H2 finger protei n RHBl [Arabi dopsis thalia nal]
172389	ATU034 329	ATL8S1 7692:5 25..1	nap					ATL8S1 7692:5 25..40 0	0.50	g99922	36	187	1.3e- 13	hypoth etical protei n - soybea n [Glyci ne max]
172390	ATU034 330	ATL8C3 9164:3 383..2 834	nap					ATL8C3 9164:3 327..2 834	0.50	g47739 10	36	166	2.2e- 09	(AF147 259) No defini tion line found [Arabi dopsis thalia nal]
172391	ATU034 331	ATL8C2 9238:6 16..13 72	nap					ATL8C2 9238:1 322..8 00	0.49	g45126 29	36	642	7.4e- 67	(AC004 793) EST gb Z33 866

172392	ATU034 332	ATL8C2 8968:1 ..1108	nap				ATL8C2 8968:3 55..11 08	0.49	g41153 62	36	865	2.3e- 86	(AC005 957) hypoth etical protei n [Arabi dopsis thalia na]
172393	ATU034 333	ATL8C8 890:1. .688	nap				ATL8C8 890:68 ..579	0.48	g40637 41	36	916	4.1e- 74	(AC005 851) putati ve Na/H antipo rter [Arabi dopsis thalia na]
172394	ATU034 334	ATL8C3 5455:6 57..39 56	nap				ATL8C3 5455:6 57..39 55	0.47	g45389 01	36	1023	4.8e- 105	(AL049 482) RNA- direct ed DNA polyme rase- like protei n [Arabi

172395	ATU034 335	ATL8S2 902:46 0..1	nap				ATL8S2 902:24 1..67	0.47	948305 7	36	123	8.0e- 13	dopsis thalia na]
172396	ATU034 336	ATL8C3 8432:1 420..1	nap				ATL8C3 8432:1 368..9 59	0.47	949143 61	36	1395	6.5e- 146	(AC007 289) putati ve revers e transc riptas e [Arabi dopsis thalia na]
172397	ATU034 337	ATL8C2 1928:1 ..1149	nap				ATL8C2 1928:4 0..110 6	0.47	930437 12	36	441	1.5e- 40	(AB011 166) KIAA05 94

172398	ATU034 338	ATL8C4 6171:1 691..1	nap					ATL8C4 6171:1 466..1 36	0.46	g37775 27	36	1520	3.0e- 156	protein [Homo sapien s]
172399	ATU034 339	ATL8C4 7383:1 ..589	nap					ATL8C4 7383:7 5..490	0.46	g28646 12	36	262	2.1e- 23	(AF053 008) gag- pol polypr oteine [Glyci ne max] (AL021 811) L- ascorb ate peroxi dase - like protein [Arabi dopsis thalia na]
172400	ATU034 340	ATL8C3 3995:1 ..999	nap					ATL8C3 3995:1 16..97 5	0.46	g45811 64	36	859		(AC006 220) putati ve polypr oteine [Arabi dopsis thalia na]
172401	ATU034 341	ATL8C1 5213:1	nap					ATL8C1 5213:1	0.45	g44163 02	36	1754	1.2e- 175	(AF105 716)

172402	ATU034 342	ATL8C2 2537:1 535..1	nap				041..2 54	0.45	945811 10	36	1573	1.4e- 152	(AC005 825) putati ve retrot ranspo son polypr otein [Arabi dopsis thalia na]
172403	ATU034 343	ATL8C1 0992:1 493..1	nap				ATL8C1 0992:1 436..1 11	0.45	937790 21	36	1552	2.1e- 159	(AC005 171) putati ve revers e transc riptas e [Arabi dopsis thalia na]
172404	ATU034 344	ATL8S6 841:1. .441	nap				ATL8S6 841:19 5..301	0.45	944328 01	36	567	(AC006 437) unknow n protei n [Arabi	

172405	ATU034 345	ATL8C3 0464:9 03..1	nap					ATL8C3 0464:6 99..65	0.45			g33675 77	36	159	4.5e- 09	dopsis thalia na] (AL031 135) putati ve protei n [Arabi dopsis thalia na]
172406	ATU034 346	ATL8C2 5898:1 010..1	nap					ATL8C2 5898:9 85..15 3	0.44			g44172 67	36	206	1.1e- 21	(AC007 019) hypoth etical protei n [Arabi dopsis thalia na]
172407	ATU034 347	ATL8C4 6280:1 ..1558	nap					ATL8C4 6280:2 84..10 08	0.43			g28654 24	36	2465	2.1e- 216	(AF039 371) polypr otein [Arabi dopsis thalia na]
172408	ATU034 348	ATL8C2 5044:1 ..631	nap					ATL8C2 5044:4 ..348	0.43			g26550 98	36	796	1.3e- 70	(AF023 472) peptid e transp orter [Horde um vulgar

172409	ATU034 349	ATL8C4 4704:1 ..1369	nap				ATL8C4 4704:9 7..132 6	0.43	g37575 16	36	672	1.6e- 59	(AC005 167) putati ve TMV resist ance protei n [Arabi dopsis thalia na]
172410	ATU034 350	ATL8C3 494:10 9..960	nap				ATL8C3 494:10 9..960	0.42	g45859 37	36	708	1.6e- 66	(AC007 211) putati ve repl ic ation protei n Al [Arabi dopsis thalia na]
172411	ATU034 351	ATL8C4 7588:1 ..523	nap				ATL8C4 7588:1 04..50 7	0.41	g43253 72	36	465	1.8e- 47	(AF128 396) contai ns simila rity to protei n disulf ide isomer ases [Arabi dopsis

172412	ATU034 352	ATL8S2 7169:1 ..293	nap					ATL8S2 7169:7 8..194	0.41	g38058 50	36	373	1.9e- 31	thalia nal (AL031 986) putati ve protei n [Arabi dopsis thalia nal]
172413	ATU034 353	ATL8C6 857:56 6..176 8	nap					ATL8C6 857:15 07..14 21	0.41	g45859 27	36	372	1.4e- 36	(AC007 211) putati ve cyclin G- associ ated kinase [Arabi dopsis thalia nal]
172414	ATU034 354	ATL8C1 5589:1 ..842	nap					ATL8C1 5589:3 41..60 8	0.41	g45811 64	36	917	6.2e- 85	(AC006 220) putati ve polypr otein [Arabi dopsis thalia nal]
172415	ATU034 355	ATL8C2 5616:1 ..621	nap							g21295 97	36	454	6.8e- 50	glutam ate dehydr ogenas e 1 -

172416	ATU034 356	ATL8S8 338:1. .302	nap							g42204 70	36	255	1.5e- 19	(AC006 069) hypoth etical protei n [Arabi dopsis thalia na]
172417	ATU034 357	ATL8C4 6055:1 ..797	nap							g46999 43	36	108	0.0001 1	(AC007 166) hypoth etical protei n [Arabi dopsis thalia na]
172418	ATU034 358	ATL8C3 0209:1 718..1 498	nap							g20621 70	36	71	0.016	(AC001 645) unknow n protei n [Arabi dopsis thalia na]
172419	ATU034 359	ATL8C3 079:1.	nap						ATL8C3 079:58	1.00	35	199	5.5e- 13	(AL021 889)

172420	ATU034 360	ATL8S1 0467:6 50..1	nap										g45875 99	36	283	8.2e- 30	(AC006 951) hypoth etical protein [Arabi dopsis thalia na]
172421	ATU034 361	ATL8C8 084:1. .884	nap										g45672 94	36	904	8.1e- 71	(AC006 918) putati ve Athila retroo lement ORF1 protein [Arabi dopsis thalia na]
172422	ATU034 362	ATL8C3 9412:1 ..476	nap										g32560 35	36	238	2.6e- 19	(Y1427 4) putati ve serine /threo nine protein

172423	ATU034 363	ATL8S8 633:54 8..319	nap										g16946 31	36	256	1.9e- 16	(D8437 4) Ccl1 [Brass ica napus]	n kinase [Sorgh um bicolor r]
172424	ATU034 364	ATL8C3 7788:1 237..1 503	nap										g10081 8	36	231	7.4e- 20	H+- transp orting ATP syntha se (EC 3.6.1. 34) chain a - wheat chloro plast []	
172425	ATU034 365	ATL8C2 9098:9 35..1	nap										g39012 94	36	759	1.5e- 54	(AF089 711) rpp8 [Arabi dopsis thalia na]	
172426	ATU034 366	ATL8C4 8037:1 ..1728	nap										g28092 47	36	273	1.5e- 25	(AC002 560) F21B7. 16 [Arabi dopsis thalia	

172427 172428 172429
 172427 172428 172429
 172427 172428 172429

172427	ATU034 367	ATL8C2 1973:1 313..1 73	nap							g44903 17	36	541	6.2e- 56	na] (AL035 678) putati ve protei n [Arabi dopsis thalia na]
172428	ATU034 368	ATL8C3 6650:1 81..1	nap							g31766 77	36	240	4.2e- 20	(AC003 671) Simila r to S. cerevi siae SIK1P protei n, A TM02 1B04.1 3 from A. thalia na BAC gb AF0 07271. [Arabi dopsis thalia na]
172429	ATU034 369	ATL8C4 457:50 1..792	nap							g47739 10	36	240	8.9e- 25	(AF147 259) No defini tion line found

172435	ATU034 375	ATL8C2 6995:7 61..1	nap							g44328 46	36	775	1.4e- 82	(AC006 283) unknown protein [Arabi dopsis thalia na]
172436	ATU034 376	ATL8C1 67:415 ..213	nap							g40380 66	36	149		(AC005 897) hypoth etical protein [Arabi dopsis thalia na]
172437	ATU034 377	ATL8S1 2882:5 35..1	nap							g45443 74	36	304	9.4e- 25	(AC006 920) unknown protein [Arabi dopsis thalia na]

172441	ATU034 381	ATL8S1 7162:5 65..7	nap										36	g48352 29	428	1.9e- 39	dopsis thalia na]
172442	ATU034 382	ATL8S1 2902:1 ..626	nap										36	g38594 92	121	0.0085	(AF076 250) hyalin [Lytec hinus varieg atus]
172443	ATU034 383	ATL8C6 126:91 ..613	nap										36	g27393 89	205	3.0e- 15	(AC002 505) Cf-2.2 like protei n [Arabi dopsis thalia na]
172444	ATU034 384	ATL8C2 9950:3 42..1	nap										36	g45811 05	381	6.6e- 32	(AC005 825) hypoth etical protei n [Arabi dopsis thalia na]

172445	ATU034 385	ATL8S2 8295:1 ..305	nap						g33675 36	36	119	2.5e- 09	(AC004 392) Contai ns simila rity to symbio sis- relate d like protei n FlN20. 80 [Arabi dopsis thalia na]
172446	ATU034 386	ATL8S2 3386:4 5..485	nap						g26226 01	36	156	2.8e- 13	(AE000 909) serine /threo nine protei n kinase relate d protei n [Metha nobact erium thermo autotr ophicu m]
172447	ATU034 387	ATL8S1 4014:6	nap						g22448 21	36	1090	6.3e- 110	(Z9733 6)

172448	ATU034 388	91..1 ATL8C2 1789:2 341..5 40	nap										g45388 96	36	750	1.1e- 59	(AL049 482) putati ve protei n [Arabi dopsis thalia na]
172449	ATU034 389	ATL8C8 335:1. .1214	nap										g49268 20	36	238	9.8e- 20	(AC004 135) T17H7. 5 [Arabi dopsis thalia na]
172450	ATU034 390	ATL8C6 12:618 .1181	nap										g49268 20	36	134	4.1e- 13	(AC004 135) T17H7. 5 [Arabi dopsis thalia na]
172451	ATU034 391	ATL8C1 329:76 0..155 0	nap										g35496 26	36	853	4.9e- 86	(AJ009 696) wall- associ ated kinase

172456	ATU034 396	ATL8S7 092:1. .553	nap								g32731 01	36	105	1.3e- 06	[Glycine max] (Y1761 3) N7 prote in [Medic ago trunca tula]
172457	ATU034 397	ATL8C4 547:1. .1231	nap								g43888 34	36	407	8.6e- 34	(AC006 528) putati ve diseas e resist ance protei n RPP1, 3' partia l [Arabi dopsis thalia na]
172458	ATU034 398	ATL8C1 5874:4 780..5 804	nap								g45593 47	36	953	1.5e- 91	(AC006 585) putati ve extens in [Arabi dopsis thalia na]
172459	ATU034	ATL8C3	nap								g44328	36	724		(AC006

172462	ATU034 402	ATL8C1 1359:1 264..1	nap										g43888 34	36	833	2.8e- 59	dopsis thalia nal (AC006 528) putati ve diseas e resist ance protei n RPP1, 3' partia l [Arabi dopsis thalia nal
172463	ATU034 403	ATL8C2 1660:1 66..17 92	nap										g43097 63	36	2012	9.7e- 180	(AC006 217) putati ve retrot ranspo son polypr otein [Arabi dopsis thalia nal
172464	ATU034 404	ATL8C2 0685:3 815..1	nap										g42638 25	36	1339	1.9e- 121	(AC006 067) hypoth etical protei n

172467	ATU034 407	ATL8S2 202:10 1..526	nap							945393 05	36	365	4.8e- 39	[Gallus gallus] (AL049 480) putati ve protei n [Arabi dopsis thalia na]
172468	ATU034 408	ATL8C1 8772:1 29..1	nap							944172 65	36	184	1.5e- 14	(AC007 019) putati ve glycin e-rich RNA bindin g protei n [Arabi dopsis thalia na]
172469	ATU034 409	ATL8C2 9153:8 7..627	nap							931641 42	36	693	3.4e- 55	(D7860 6) cytoch rome P450 monoox ygenase [Arabi dopsis thalia]

172470	ATU034 410	ATL8C1 462:17 52..90 9	nap									g42635 22	36	749	1.6e- 74	na] (AC004 044) hypoth etical protei n [Arabi dopsis thalia na]
172471	ATU034 411	ATL8C4 6920:2 21..96	nap									g31352 77	36	96	1.2e- 08	(AC003 058) hypoth etical protei n [Arabi dopsis thalia na]
172472	ATU034 412	ATL8C4 6416:1 020..5 56	nap									g42638 17	36	639	6.9e- 63	(AC006 067) putati ve mudR transp oson assoc. protei n [Arabi dopsis thalia na]
172473	ATU034 413	ATL8C4 3345:1 591..1 350	nap									g47739 10	36	219		(AF147 259) No defini tion

172474	ATU034 414	ATL8C3 7779:1 ..798	nap											g31691 71	36	348	9.0e- 24	(AC004 401) putati ve serine carbox ypepti dase I [Arabi dopsis thalia na]	line found [Arabi dopsis thalia na]
172475	ATU034 415	ATL8S2 4924:1 ..561	nap											g38602 53	36	168	2.0e- 12	(AC005 824) hypoth etical protei n [Arabi dopsis thalia na]	
172476	ATU034 416	ATL8S9 644:60 9..1	nap											g26227 73	36	213	5.0e- 19	(AE000 ⁺ 923) ABC transp orter [Metha nobact erium thermo autotr ophicu m]	

172477	ATU034 417	ATL8C3 3919:1 ..317	nap							g22449 78	36	126	(Z9734 0) similarity to splicing factor SF3a 120K chain - human [Arabis dopsis thaliana na]
172478	ATU034 418	ATL8C2 4355:1 ..376	nap							g46782 74	36	500	(AL049 660) putative protein [Arabis dopsis thaliana na]
172479	ATU034 419	ATL8C1 7598:1 905..1	nap							g44328 66	36	2260	(AC006 300) putative reverse transcriptase [Arabis dopsis thaliana na]

172480	ATU034 420	ATL8C3 1779:1 876..1 571	nap						g29824 55	36	244	8.0e- 15	(AL022 223) putati ve uracil phosph oribos yl transf erase [Arabi dopsis thalia na]
172481	ATU034 421	ATL8S1 3248:1 ..340	nap						g21449 12	36	106	0.992	saliva ry prolin e-rich glycop rotein precu sor PRB4 (large allele) - human []
172482	ATU034 422	ATL8C2 1377:5 05..1	nap						g36953 97	36	648	3.4e- 65	(AF096 372) No defini tion line found [Arabi dopsis thalia na]
172483	ATU034	ATL8S2	nap						g30470	36	266	2.3e-	(AF058

172491	430	3319:4 041..4 333	nap							10	36	155	30	259) No defini tion line found [Arabi dopsis thalia nal]
	ATU034 431	ATL8S3 579:53 5..1								g45858 84	36	1.3e- 10		(AC005 850) Hypoth etical protei n [Arabi dopsis thalia nal]
172492	ATU034 432	ATL8C2 2990:4 387..1 861	nap							g28646 26	36	2.5e- 27		(AL021 811) cytoch rome p450 - like protei n [Arabi dopsis thalia nal]
172493	ATU034 433	ATL8C3 1870:8 9..136 9	nap							g22528 40	36	3.0e- 17		(AF013 293) contai ns region s of simila rity

172497	ATU034 437	ATL8S2 5555:1 ..383	nap										g45899 71	36	75	5.5e- 05	[Halof erax volcan ii] (AC007 195) putati ve blue copper - bindin g protei n II [Arabi dopsis thalia na]
172498	ATU034 438	ATL8C6 794:1. .560	nap										g25013 53	36	564	8.7e- 56	TRANSK ETOLAS E, CHLORO PLAST (TK) [Crate rostig ma planta gineum]
172499	ATU034 439	ATL8C1 8561:1 074..2 00	nap										g33675 32	36	1290	1.4e- 132	(AC004 392) Strong simila rity to unknow n protei

172500	ATU034 440	ATL8S2 5497:1 ..258	nap							g11512 5	36	190	1.4e- 15	n T28M21 .21 [Arabi dopsis thalia na]
														HIGH- AFFINI TY BRANCH ED- CHAIN AMINO ACID TRANSP ORT ATP- BINDIN G PROTEI N BRAG [Pseud omonas aerugi nosa]
172501	ATU034 441	ATL8C2 0330:1 ..647	nap							g28326 77	36	228	1.7e- 22	(AL021 712) hypoth etical protei n [Arabi dopsis thalia na]
														(AC002 334) simila r to
172502	ATU034 442	ATL8C4 0028:1 ..857	nap							g29247 85	36	590	1.0e- 54	

	444	5294:1 0..383								07				18	446) putati ve pol polypr otein [Arabi dopsis thalia na]
172505	ATU034 445	ATL8S1 0705:4 25..1	nap							g45394 50	36	620		3.6e- 57	(AL049 500) putati ve protei n [Arabi dopsis thalia na]
172506	ATU034 446	ATL8C3 5051:1 709..6 88	nap							g23471 90	36	1414		2.3e- 139	(AC002 338) Na/H antipo rter isolog [Arabi dopsis thalia na]
172507	ATU034 447	ATL8C3 7723:4 78..1	nap							g37859 79	36	200		2.0e- 19	(AC005 560) putati ve serine protea se [Arabi dopsis thalia na]

172508 172509 172510 172511
 172508 172509 172510 172511
 172508 172509 172510 172511

172508	ATU034 448	ATL8C2 850:74 8..1	nap						g36680 75	36	348	3.7e- 28	(AC004 667) hypoth etical protein [Arabi dopsis thalia na]
172509	ATU034 449	ATL8C3 8518:1 027..7 54	nap						g30804 08	36	338	9.6e- 32	(AL022 604) putati ve protein [Arabi dopsis thalia na]
172510	ATU034 450	ATL8C4 5788:1 ..774	nap						g42630 63	36	718	7.9e- 61	(AC005 142) hypoth etical protein [Arabi dopsis thalia na]
172511	ATU034 451	ATL8S9 196:25 9..562	nap						g11768 15	36	267	6.0e- 23	HYPOTH ETICAL PROTEI N HI1654 [Haemo philus influe nzae Rd]

172512	ATU034 452	ATL8C1 1708:1 053..1 377	nap							g45811 24	36	139	2.0e- 06	(AC005 825) hypoth etical protei n [Arabi dopsis thalia na]
172513	ATU034 453	ATL8C1 2990:1 ..827	nap							g22448 26	36	1272	2.5e- 131	(Z9733 6) repli cation contro l protei n homolo g [Arabi dopsis thalia na]
172514	ATU034 454	ATL8S2 0566:4 02..59 2	nap							g19463 67	36	74	0.0017	(U9321 5) unknow n protei n [Arabi dopsis thalia na]
172515	ATU034 455	ATL8C4 0361:9 38..35 8	nap							g43098 67	36	193	6.1e- 25	(AC006 527) putati ve Athila retro

172520	459	209:50 41..53 33								10		36	339	2.4e- 31	(Y1394 2) GTN Reduct ase [Agrob acteri um radiob acter]	259) No defini tion line found [Arabi dopsis thalia na]
172521	ATU034 461	ATL8S2 3337:4 18..1	nap							g26239 67		36	907	2.4e- 73	(AC006 528) putati ve DNA reptic ation licens ing factor with an MCM family domain (prosi te:PDO C00662) [Arabi dopsis thalia na]	

172522	ATU034 462	ATL8S2 3053:5 83..10 6	nap						924940 93	36	282	4.6e- 24	PROBAB LE GLUTAM ATE DEHYDR OGENAS E (GDH) [Rhizo bium sp. NGR234]
172523	ATU034 463	ATL8S1 4542:1 ..436	nap						938343 14	36	158	1.4e- 13	(AC005 679) Simila r to gene pi010 glycos yltran sferas e [Arabi dopsis thalia na]
172524	ATU034 464	ATL8C4 1022:8 12..43 7	nap						930754 01	36	143	3.3e- 10	(AC004 484) hypoth etical protei n [Arabi dopsis thalia na]
172525	ATU034 465	ATL8C1 0863:1 874..2	nap						926424 31	36	1733	6.1e- 165	(AC002 391) putati

172529	ATU034 469	ATL8C2 2307:1 198..1 486	nap							g47739 10	36	299	2.1e- 23	thalia na] (AF147 259) No defini tion line found [Arabi dopsis thalia na] (AC007 202) Simila r to []
172530	ATU034 470	ATL8C1 5599:3 610..4 390	nap							g48357 71	36	123	8.8e- 07	(AC007 213) unknow n protei n [Arabi dopsis thalia na] (AB004 809) phosph ate transp orter [Catha ranthu s roseus]
172531	ATU034 471	ATL8C2 4236:1 253..6 42	nap							g46894 74	36	936	2.9e- 86	(AC007 213) unknow n protei n [Arabi dopsis thalia na] (AB004 809) phosph ate transp orter [Catha ranthu s roseus]
172532	ATU034 472	ATL8C3 6138:1 ..1758	nap							g22089 08	36	380	3.6e- 35	(AB004 809) phosph ate transp orter [Catha ranthu s roseus]
172533	ATU034	ATL8C1	nap							g47738	36	890	5.4e-	(AF076

	473	4063:3 27..16 65							94				89	243) hypoth etical protei n [Arabi dopsis thalia na]
172534	ATU034 474	ATL8C2 5317:1 ..1022	nap						g49268 20	36	336	1.2e- 35	(AC004 135) T17H7. 5 [Arabi dopsis thalia na]	
172535	ATU034 475	ATL8C4 2995:1 000..1	nap						g43888 25	36	1138	4.2e- 106	(AC006 528) putati ve pol polypr oteins with revers e transc riptas e domain (Pfam: PF0007 8) [Arabi dopsis thalia na]	
172536	ATU034 476	ATL8C4 3468:1 154..1	nap						g44163 02	36	1759		(AF105 716) copia-	

172537	ATU034 477	ATL8C4 8476:7 90..1	nap										g44328 23	36	625	1.9e- 57	(AC006 593) hypoth etical protei n [Arabi dopsis thalia na]	type pol polypr oteins [Zea mays]
172538	ATU034 478	ATL8C2 9502:8 53..1	nap										g32427 13	36	1212	1.0e- 109	(AC003 040) putati ve transp osase [Arabi dopsis thalia na]	
172539	ATU034 479	ATL8S1 5153:3 36..1	nap										g31832 44	36	182	1.3e- 16	HYPOTH ETICAL 34.1 KD PROTEI N IN TPX- FNR INTERG ENIC REGION [Esche richia coli]	

172540	ATU034 480	ATL8C5 334:15 48..11 90	nap							g30754 01	36	194	2.4e- 17	(AC004 484) hypoth etical protei n [Arabi dopsis thalia na]
172541	ATU034 481	ATL8S6 22:1.. 595	nap							g45876 78	36	886	1.3e- 88	(AC007 197) putati ve diseas e resist ance gene, 5, partia l [Arabi dopsis thalia na]
172542	ATU034 482	ATL8S2 9150:5 42..1	nap							g17309 61	36	198	1.8e- 13	HYPOTH ETICAL 58.2 KD PROTEI N IN KDGT- XPT INTERG ENIC REGION [Bacil lus subtil

172547	ATU034 487	ATL8C4 3399:1 720..9 11	nap					ATL8C4 3399:1 696..9 97	0.98	g45809 90	35	222	dopsis thalia nal (AF120 335) putati ve transp osase [Arabi dopsis thalia nal]
172548	ATU034 488	ATL8C2 7353:1 ..724	nap					ATL8C2 7353:1 38..72 4	0.98	g32490 68	35	799	(AC004 473) Contai ns simila rity to zinc- bindin g protei n (PWA33) gb L04 190 from Pleuro deles waltli i. [Arabi dopsis thalia nal]
172549	ATU034 489	ATL8C8 044:1.	nap					ATL8C8 044:91	0.97	g40380 57	35	387	(AC005 897)

172552	ATU034 492	ATL8C5 052:52 9..1	nap					ATL8C5 052:45 9..16	0.97	g73205 0	35	628	2.4e- 54	protei n fragme nt [Arabi dopsis thalia na]
172553	ATU034 493	ATL8C2 4561:9 59..88	nap					ATL8C2 4561:9 59..42 0	0.97	g44907 04	35	463	9.5e- 54	(AL035 680) putati ve protei n [Arabi dopsis thalia na]
172554	ATU034 494	ATL8C1 4035:1 ..514	nap					ATL8C1 4035:5 7..514	0.97	g45861 19	35	115	6.6e- 06	(AL049 638) putati ve protei n [Arabi

172555	ATU034 495	ATL8C3 3933:1 ..902	nap				ATL8C3 3933:8 2..902	0.96	g43245 97	35	588		dopsis thalia nal (AF106 324) sodium proton exchan ger Nhxl [Arabi dopsis thalia nal]
172556	ATU034 496	ATL8C1 8431:1 71..1	nap				ATL8C1 8431:1 71..87	0.96	g31525 88	35	112	1.4e- 06	(AC002 986) Contai ns simila rity to Cf- 2.2 gene gb U42 445 from Solanu m pimpin ellifo lium. [Arabi dopsis thalia nal]
172557	ATU034 497	ATL8C1 6502:1 ..1455	nap				ATL8C1 6502:3 03..14 42	0.95	g41764 46	35	166	9.4e- 08	(AL022 238) dJ1042 K10.2. 1

172558	ATU034 498	ATL8S2 9189:4 65..1	nap							ATL8S2 9189:4 08..62	0.95	g92757 5	35	171	4.5e- 15	(novel protein with probable rabGAP domains and Src homology domain 3) (isoform 1) [Homo sapiens]
172559	ATU034 499	ATL8C1 0985:1 ..376	nap							ATL8C1 0985:1 54..31 7	0.95	g42636 53	35	208	6.0e- 10	(AC006 136) hypothetical protein [Arabidopsis thaliana]
172560	ATU034 500	ATL8C4 6746:9 62..44	nap							ATL8C4 6746:8 71..44	0.95	g41917 95	35	301	2.3e- 27	(AC005 917) putative

172561	ATU034 501	2	ATL8C4 9544:1 ..875	nap					ATL8C4 9544:1 77..55 0	0.95	g30803 97	35	669	1.4e- 49	(AL022 603) hypoth etical protei n [Arabi dopsis thalia nal]
172562	ATU034 502		ATL8C8 573:1. .677	nap					ATL8C8 573:16 1..573	0.94	g48871 31	35	351	8.9e- 32	(AF134 732) 60S riboso mal protei n L1 [Prunu s armeni aca]
172563	ATU034 503		ATL8S1 3206:1 ..480	nap					ATL8S1 3206:4 28..37 2	0.94	g26337 27	35	179	9.1e- 16	(Z9911 1) ykrT [Bacil lus subtil is]
172564	ATU034 504		ATL8C3 1246:5	nap					ATL8C3 1246:5	0.93	g45858 77	35	206	2.8e- 17	(AC005 850)

172572	511	4032:6 04..1					4032:6 03..67	9	29	POLY- ALPHA- D- GALACT URONOS IDASE PRECUR SOR (EXO- PG) [Erwin ia chrysa nthemi]
	ATU034 512	ATL8C4 5673:1 ..3194	nap				ATL8C4 5673:1 19..31 94	0.90	865	(AL049 657) putati ve protei n [Arabi dopsis thalia na]
172573	ATU034 513	ATL8C2 3408:8 49..14 53	nap				ATL8C2 3408:8 49..14 25	0.90	580	(AC004 521) putati ve protei nase [Arabi dopsis thalia na]
172574	ATU034 514	ATL8C3 2121:8 3..138 1	nap				ATL8C3 2121:8 3..138 1	0.89	350	(AF058 826) simila r to eukary

172575	ATU034 515	ATL8S2 9336:5 92..24 2	nap					ATL8S2 9336:3 56..24 2	0.89	g45389 11	35	473	5.9e- 41	otic protei n kinase domain s (Pfam: pkinas e.hmm, score: 171.43) [Arabi dopsis thalia na]
172576	ATU034 516	ATL8C5 0262:1 ..1210 2	nap					ATL8C5 0262:1 96..67 7	0.88	g42638 22	35	532	9.5e- 50	(AL049 482) hypoth etical protei n [Arabi dopsis thalia na]
172577	ATU034	ATL8C4	nap					ATL8C4	0.88	g48368	35	1831	1.2e-	(AC006 067) putati ve recept or protei n kinase [Arabi dopsis thalia na]
														(AC007)

172578	517	6583:1 204..1	nap					6583:1 188..7 8	0.88	g28296 11	35	116	179	369) Similax RNA helices [Arabi dopsis thaliana] HEMK PROTEIN HOMOLOG [Synec hocystis sp.] (AC003970) Hypothetical protein [Arabi dopsis thaliana] (AF037168) DnaJ homologue [Arabi dopsis thaliana] LYSOZYME M1
	ATU034 518	ATL8C4 3379:1 ..539	nap					ATL8C4 3379:1 49..50 2	0.88					
172579	519	ATL8C3 2667:2 792..3 245	nap					ATL8C3 2667:2 792..3 171	0.88	g34829 22	35	394	1.0e- 37	
	ATU034 520	ATL8S1 0613:5 67..27 3	nap					ATL8S1 0613:3 75..27 3	0.88	g26897 20	35	151	1.2e- 10	
172580	521	ATL8S2 0793:1	nap					ATL8S2 0793:2	0.88	g12665 2	35	89	4.2e- 09	

									09..40 6										PRECUR SOR (1,4- BETA- N- ACETYL MURAMI DASE M1) [Strep tomyce s globis porus]
172582	ATU034 522	ATL8C4 1322:1 ..544	nap					ATL8C4 1322:1 31..46 2	0.87	g21473 71	35	379	1.5e- 37						feebly protei n - tomato [Lycop ersico n escule ntum]
172583	ATU034 523	ATL8C3 0966:1 ..560	nap					ATL8C3 0966:2 50..47 7	0.87	g24948 15	35	105	7.2e- 07						PUTATI VE BETA- XYLOSI DASE (1,4- BETA- D- XYLAN XYLOHY DROLAS E) (XYLAN 1,4- BETA- XYLOSI DASE)

172584	ATU034 524	ATL8S1 1667:1 ..546	nap					ATL8S1 1667:2 00..45 1	0.87		g44172 79	35	850	1.8e- 82	[Esche richia coli] (AC007 019) hypoth etical protei n [Arabi dopsis thalia na]
172585	ATU034 525	ATL8S2 7645:1 ..512	nap					ATL8S2 7645:7 4..303	0.87		g28298 75	35	370	3.4e- 38	(AC002 396) Hypoth etical protei n [Arabi dopsis thalia na]
172586	ATU034 526	ATL8S3 062:38 6..1	nap					ATL8S3 062:38 6..60	0.87		g30247 67	35	479	5.6e- 47	PROEAB LE TARTRA TE DEHYDR OGENAS E (TDH) [Esche richia coli]
172587	ATU034 527	ATL8C2 4685:1 396..1	nap					ATL8C2 4685:1 338..1 4	0.87		g29824 31	35	1665	2.4e- 148	(AL022 224) leucin e rich e repeat -like

[illegible]

172588	ATU034 528	ATL8C2 6707:4 22..22 82	nap					ATL8C2 6707:9 22..20 21	0.86		g23350 96	35	493	6.1e- 40	protein [Arabi dopsis thalia na]
172589	ATU034 529	ATL8C3 6802:7 87..18 38	nap					ATL8C3 6802:7 87..17 72	0.86		g44540 12	35	822	2.2e- 59	protein [Arabi dopsis thalia na]
172590	ATU034 530	ATL8C3 5211:1 ..1928	nap					ATL8C3 5211:1 03..16 78	0.86		g58690 1	35	243	8.6e- 17	DNA REPAIR PROTEI N RADA HOMOLO G (DNA REPAIR PROTEI N SMS

172591	ATU034 531	ATL8C3 6030:8 69..1	nap					ATL8C3 6030:7 48..41 0	0.86			g29470 63	35	517	4.9e- 48	HOMOLOG [Bacillus subtilis]
172592	ATU034 532	ATL8C2 4616:1 ..612	nap					ATL8C2 4616:1 69..61 2	0.85			g42494 10	35	320	3.0e- 27	(AC006 072) unknown protein [Arabis dopsis thaliana]
172593	ATU034 533	ATL8S1 2041:1 ..609	nap					ATL8S1 2041:5 3..393	0.85			g41853 10	35	891	9.8e- 71	(AF090 446) gag protein [Zea mays]
172594	ATU034 534	ATL8S7 53:601 ..1	nap					ATL8S7 53:455 ..157	0.85			g26641 0	35	436	2.6e- 45	CDC2+/ CDC28- RELATE D

172595	ATU034 535	ATL8S2 3124:1 ..642	nap					ATL8S2 3124:4 96..54 9	0.85	g22621 11	35	374	2.9e- 39	PROTEIN KINASE R2 [Oryza sativa]. (AC002 343) ribitol dehydr ogenase isolog [Arabi dopsis thalia na]
172596	ATU034 536	ATL8C2 1592:7 19..1	nap					ATL8C2 1592:5 95..39	0.85	g22135 90	35	377	2.5e- 33	(AC000 348) T7N9.1 0 [Arabi dopsis thalia na]
172597	ATU034 537	ATL8C3 4298:9 0..125 7	nap					ATL8C3 4298:2 13..12 04	0.84	g30466 94	35	743	2.3e- 76	(AL022 224) vacuol ar sortin g recept or- like protei n [Arabi dopsis

172598	ATU034 538	ATL8C1 7873:1 855..1	nap				ATL8C1 7873:1 380..7 58	0.84	g44327 94	35	1089		thalia nal (AC006 437) putati ve .Tnp2 Tam1 transp oson protei n [Arabi dopsis thalia nal]
172599	ATU034 539	ATL8S2 9510:1 ..531	nap				ATL8S2 9510:2 4..491	0.84	g17811 80	35	124	4.8e- 07	(Z8385 9) hypoth etical protei n Rv1867 [Mycob acteri um tuberc ulosis]
172600	ATU034 540	ATL8S2 4202:1 ..512	nap				ATL8S2 4202:3 34..15	0.84	g58142 6	35	416	1.2e- 33	(X6503 3) threon ine syntha se [Pseud omonas aerugi nosa]
172601	ATU034	ATL8S6	nap				ATL8S6	0.83	g31579	35	129	7.8e-	(AC002

172604	ATU034 544	272..1					990..1 85	0.83	g39534 61	35	610	5.3e- 33	hypothetical protein [Arabidopsis thaliana]
		ATL8C2 2564:1 ..837	nap				ATL8C2 2564:6 8..765	0.83					(AC002328) F20N2.6 [Arabidopsis thaliana]
172605	ATU034 545	ATL8C3 5783:2 941..3 406	nap				ATL8C3 5783:2 962..3 343	0.83	g32692 85	35	357	3.7e- 23	(AL030978) hypothetical protein [Arabidopsis thaliana]
172606	ATU034 546	ATL8S2 9909:1 ..529	nap				ATL8S2 9909:1 2..529	0.83	g40333 84	35	102	1.1e- 07	CELL DIVISION PROTEIN FTSZ [Buchnera aphidicola]
172607	ATU034 547	ATL8C2 1130:1 577..1	nap				ATL8C2 1130:1 147..2 01	0.83	g38058 54	35	176	9.1e- 17	(AL031986) putative protein

172608	ATU034 548	ATL8C8 5:1369 ..24	nap				ATL8C8 5:430. .64	0.83	g49143 81	35	472	8.7e- 45	n [Arabi dopsis thalia na] (AC007 584) unknow n protei n [Arabi dopsis thalia na]
172609	ATU034 549	ATL8C7 294:1. .1477	nap				ATL8C7 294:58 3..146 4	0.82	g45041 61	35	122	2.4e- 10	G-rich RNA sequen ce bindin g factor 1 [Homo sapien s]
172610	ATU034 550	ATL8S1 0655:1 ..583	nap				ATL8S1 0655:6 8..557	0.81	g23529 25	35	552	1.6e- 53	(AF012 864) plasti dic 3- deoxy- D- arabin o- heptul osonat e 7- phosph ate syntha

172611	ATU034 551	ATL8C4 0888:6 97..1	nap					ATL8C4 0888:6 17..51	0.81	939351 55	35	89	5.8e- 07	(AC005 106) T25N20 .19 [Arabi dopsis thalia na]
172612	ATU034 552	ATL8C3 8655:1 119..2 300	nap					ATL8C3 8655:1 119..2 246	0.81	928276 50	35	1242	7.2e- 95	(AL021 637) potass ium transp orter- like protei n [Arabi dopsis thalia na]
172613	ATU034 553	ATL8C5 750:30 6..565 5	nap					ATL8C5 750:65 7..534 1	0.81	942637 90	35	2734	2.4e- 183	(AC006 068) putati ve ch- TOG protei n [Arabi dopsis thalia na]
172614	ATU034 554	ATL8C2 1705:1	nap					ATL8C2 1705:7	0.80	942635 43	35	1025	2.2e- 95	(AC006 250)

172615	ATU034 555	..1021	nap					7..102 1	0.80	g38058 48	35	442	5.6e- 41	putative Athila retroel ement ORF1 protei n [Arabi dopsis thalia na]
172616	ATU034 556	ATL8C4 096:1. .573	nap					ATL8C4 096:20 9..573	0.79	g28276 27	35	115	4.0e- 08	(AL031 986) putati ve protei n [Arabi dopsis thalia na]
172617	ATU034 557	ATL8C1 4158:1 ..1177	nap					ATL8C1 4158:9 0..117 7	0.79	g21911 44	35	1508	1.1e- 149	(AL021 636) hypoth etical protei n [Arabi dopsis thalia na]
														(AF007 269) A IG00 2N01.2 4 gene produc t [Arabi

172618	ATU034 558	ATL8C3 9752:1 ..597	nap				ATL8C3 9752:2 74..59 7	0.79		g26335 44	35	203	8.3e- 13	(Z9911 0) yicL [Bacil lus subtil is]	dopsis thalia nal
172619	ATU034 559	ATL8C4 0758:1 ..1621	nap				ATL8C4 0758:8 8..150 0	0.79		g22448 94	35	943	4.5e- 76	(Z9733 8) simila rity to cycloa rtenol syntha se [Arabi dopsis thalia nal]	
172620	ATU034 560	ATL8C3 4031:1 ..951	nap				ATL8C3 4031:5 0..772	0.79		g44163 01	35	1319	1.0e- 111	(AF105 716) gag protei n [Zea mays]	
172621	ATU034 561	ATL8C4 4437:1 242..4 89	nap				ATL8C4 4437:1 078..4 89	0.79		g28298 96	35	501	4.7e- 52	(AC002 311) highly simila r to auxin- regula ted protei n GH3,	

172622	ATU034 562	ATL8C1 5522:9 51..1	nap					ATL8C1 5522:8 50..5	0.79	g39351 57	35	856	4.8e- 76	(AC005 106) T25N20 .21 [Arabi dopsis thalia na]	gp X60 033 18 591, [Arabi dopsis thalia na]
172623	ATU034 563	ATL8C4 1817:2 14..12 27	nap					ATL8C4 1817:4 68..12 27	0.78	g27087 47	35	80	5.5e- 06	(AC003 952) putati ve glycin e- rich, zinc- finger DNA- bindin g protei n [Arabi dopsis thalia na]	ve glycin e- rich, zinc- finger DNA- bindin g protei n [Arabi dopsis thalia na]
172624	ATU034 564	ATL8S5 162:14 3..563	nap					ATL8S5 162:14 6..457	0.78	g45391 92	35	295	1.6e- 16	(AL049 485) probab le acetyl coA, acetyl	(AL049 485) probab le acetyl coA, acetyl

172625	ATU034 565	ATL8C2 5043:1 ..581	nap				ATL8C2 5043:1 99..46 3	0.78	g45103 48	35	196	2.7e- 20	(AC006 921) unknown protein [Arabi dopsis thalia na]
172626	ATU034 566	ATL8S2 5867:1 ..464	nap				ATL8S2 5867:2 66..96	0.77	g58520 3	35	72	2.7e- 09	GLUTAM INE SYNTH E 3 TASE ROOT ISOZYM (GLUTA MATE-- AMMONI A LIGASE) (GS112) [Zea mays]
172627	ATU034 567	ATL8S2 927:51 1..1	nap				ATL8S2 927:40 9..227	0.77	g21167 59	35	292	6.8e- 13	(D8641 8) yfnA [Bacil

172628	ATU034 568	ATL8C1 3962:1 0457.. 9180	nap				ATL8C1 3962:1 0358.. 9180	0.77	g42637 68	35	329	5.2e- 27	lus subtil is] (AC006 218) hypoth etical protei n [Arabi dopsis thalia na]
172629	ATU034 569	ATL8C4 8972:1 ..951	nap				ATL8C4 8972:1 04..94 8	0.77	g31579 41	35	177	8.4e- 15	(AC002 131) Contai ns simila rity to hypoth etical protei n gb U95 973 from A. thalia na. [Arabi dopsis thalia na]
172630	ATU034 570	ATL8C3 1755:1 200..4 00	nap				ATL8C3 1755:8 87..59 6	0.76	g43097 31	35	459	1.4e- 45	(AC006 439) hypoth etical protei n

172631	ATU034 571	ATL8C2 477:92 ..804	nap					ATL8C2 477:92 ..804	0.76	g21902 59	35	233	7.8e- 18	[Arabi dopsis thalia na] (D8638 5) A- type cyclin [Catha ranthu s roseus]
172632	ATU034 572	ATL8C4 7113:2 35..10 88	nap					ATL8C4 7113:2 48..10 77	0.76	g45314 44	35	574	4.9e- 47	(AC006 224) putati ve protei n kinase [Arabi dopsis thalia na]
172633	ATU034 573	ATL8C4 0742:2 169..1	nap					ATL8C4 0742:2 108..6 2	0.76	g44328 54	35	146	2.2e- 10	(AC006 300) hypo thetical protei n [Arabi dopsis thalia na]
172634	ATU034 574	ATL8C4 7707:1 682..1 72	nap					ATL8C4 7707:1 682..1 99	0.75	g48849 06	35	460	1.6e- 35	(AF134 570) exonuc lease ExoI [Xenop

172635	ATU034 575	ATL8C8 820:14 31..1	nap					ATL8C8 820:11 37..31 9	0.75	g36872 27	35	1483	4.7e- 125	(AC005 169) hypoth etical protei n [Arabi dopsis thalia na]	us laevis]
172636	ATU034 576	ATL8C1 9009:9 42..1	nap					ATL8C1 9009:7 64..46	0.74	g31526 20	35	1514	2.3e- 156	(AC004 482) putati ve C2H2 zinc finger protei n [Arabi dopsis thalia na]	
172637	ATU034 577	ATL8C2 8684:1 ..624	nap					ATL8C2 8684:6 ..148	0.74	g41159 14	35	275	6.4e- 29	(AF118 222) contai ns simila rity to Iron/A scorba te family of oxidor educta	

172638	ATU034 578	ATL8C3 3315:1 ..610	nap					ATL8C3 3315:1 7..132	0.74	g48357 90	35	97	0.0004 8	ses (Pfam: PF0067 1, Score= 297.8, E=1.3e -85, N=1) [Arabi dopsis thalia na]
172639	ATU034 579	ATL8C3 7907:1 ..1323	nap					ATL8C3 7907:9 ..1323	0.74	g33745 09	35	85	0.0021	(AB016 529) Ku70 [Gallu s gallus]
172640	ATU034 580	ATL8C1 9816:1 ..1848	nap					ATL8C1 9816:4 50..96 4, ATL8C1 9816:1 462..1 798	0.74, 0.49	g30470 72	35	997	1.5e- 73	(AF058 825) No defini tion line found [Arabi dopsis thalia na]
172641	ATU034	ATL8C3	nap					ATL8C3	0.73	g13619	35	779	8.1e-	ARP

581	2495:2 07..11 35	nap				2495:3 29..10 80	83				72	protei n - Arabid opsis thalia na [Arabi dopsis thalia na]
172642	ATU034 582	ATL8S1 635:41 9..67	nap			ATL8S1 635:35 6..67	gl4042 2	35	97	0.0001 9		HYPOTH ETICAL 30.9 KD PROTEI N IN HEMM- PRSA INTERG ENIC REGION [Esche richia coli]
172643	ATU034 583	ATL8C4 5416:1 ..3363	nap			ATL8C4 5416:3 58..32 66	g32872 70	35	707	1.8e- 50		(Y0953 3) involv ed in starch metaba lism [Solan um tubero sum]
172644	ATU034 584	ATL8C3 32:1.. 780	nap			ATL8C3 32:141 ..780	g41159 25	35	224	1.0e- 14		(AF118 222) contai ns simila

172645	ATU034 585	ATL8C3 496:61 7..1	nap					ATL8C3 496:50 8..43	0.71	g47536 60	35	351	3.0e- 20	rity to RNA recogn ition motifs (Pfam: PF0007 6, Score= 5.5e- 23, N=2) [Arabi dopsis thalia na]
172646	ATU034 586	ATL8C3 6132:7 03..39 98	nap					ATL8C3 6132:7 03..39 98	0.71	g44067 75	35	112	1.8e- 11	(AL049 751) putati ve protei n [Arabi dopsis thalia na]
172647	ATU034 587	ATL8C9 823:1. .357	nap					ATL8C9 823:73 ..357	0.70	g44068 06	35	473	0.054	(AC006 836) unknow n protei n [Arabi dopsis thalia na]

172648	ATU034 588	ATL8S1 7188:1 ..563	nap					ATL8S1 7188:1 4..301	0.70	g47339 92	35	675	1.8e- 63	(AC007 188) putati ve pol polypr oteins [Arabi dopsis thalia na]
172649	ATU034 589	ATL8C2 6415:3 91..90 5	nap					ATL8C2 6415:3 91..74 6	0.69	g42042 94	35	184	1.3e- 09	(AC003 027) lcl pr t_seq No defini tion line found [Arabi dopsis thalia na]
172650	ATU034 590	ATL8C4 9452:9 89..1	nap					ATL8C4 9452:9 89..26 3	0.69	g41153 62	35	729	5.3e- 73	(AC005 957) hypoth etical protei n [Arabi dopsis thalia na]
172651	ATU034	ATL8C2	nap					ATL8C2	0.68	g27363	35	77	0.0006	(AF039

172652	591	5491:1 362..8 31						5491:1 298..8 31	0.68	g45443 72	35	1340	4.4e- 166	5	035) contai ns simila rity to 4- nitrop henylp hospha tases [Caeno rhabdi tis elegan s]
	ATU034 592	ATL8C4 1060:2 104..2 33	nap					ATL8C4 1060:1 692..5 56							(AC006 920) putati ve revers e transc riptas e [Arabi dopsis thalia nal]
172653	ATU034 593	ATL8S1 9607:5 2..525	nap					ATL8S1 9607:5 2..483	0.67	g12934 7	35	88	5.2e- 07		FATTY ACYL RESPON SIVE REGULA TOR (P30 PROTEI N) [Esche richia coli]

172663	ATU034 603	ATL8C1 8793:1 ..1018	nap					ATL8C1 8793:1 10..95 7	0.64	940384 81	35	119	2.3e- 09	oson [Arabi dopsis thalia nal]
172664	ATU034 604	ATL8C2 5893:1 515..7 57	nap					ATL8C2 5893:1 372..7 91	0.64	941913 96	35	248	3.1e- 15	(AL021 713) DNA bindin g-like protei n [Arabi dopsis thalia nal]
172665	ATU034 605	ATL8C1 5755:2 503..1 889	nap					ATL8C1 5755:2 140..1 920	0.64	944553 56	35	295	1.4e- 22	(AF096 304) putati ve sterol reduct ase SR-1 [Homo sapien s]
172666	ATU034 606	ATL8C4 1761:7 553..1	nap					ATL8C4 1761:7 553..1	0.64	928646 22	35	922	1.7e- 89	(AL035 524) putati ve protei n [Arabi dopsis thalia nal]
														(AL021 811) putati

172667	ATU034 607	0281	ATL8S2 8112:4 65..1	nap				0167	ATL8S2 8112:4 39..32	0.63	g33228 11	35	257	3.2e- 24	ve protei n [Arabi dopsis thalia na]
172668	ATU034 608	ATL8C1 8500:3 256..1 83	nap					ATL8C1 8500:3 079..1 630	0.63	g42621 59	35	427	2.5e- 21	(AC005 275) hypoth etical protei n [Arabi dopsis thalia na]	
172669	ATU034 609	ATL8C3 5850:1 ..781	nap					ATL8C3 5850:1 63..78 1	0.63	g22136 29	35	357	1.1e- 13	(AC000 103) F21J9. 21 [Arabi dopsis thalia na]	
172670	ATU034 610	ATL8C6 801:1.	nap					ATL8C6 801:67	0.63	g24925 05	35	688	3.6e- 77	CELL DIVISI	

172671	ATU034 611	ATL8C2 356:1. .993	nap						..1719	0.63	g48369 37	35	676	2.4e- 62	ON CYCLE PROTEI N 48 HOMOLO G MJ1156 [Metha nococc us jannas chiil]
172672	ATU034 612	ATL8S2 5624:4 47..1	nap						ATL8C2 356:41 3..910	0.62	g45726 41	35	446	2.5e- 39	(AC006 085) Hypoth etical protei n [Arabi dopsis thalia nal]
172673	ATU034 613	ATL8C3 3199:1 ..1252	nap						ATL8C3 3199:2 2..124 2	0.62	g48877 49	35	758	3.9e- 76	(AJ133 785) initia tor protei n DnaA [Therm us thermo philus]
															(AC006 533) putati ve poly(A DP- ribose

172674	ATU034 614	ATL8C6 021:13 ..677	nap				ATL8C6 021:25 ..667	0.62	940069 17	35	344	1.1e- 30	(Z9970 8) putati ve protei n [Arabi dopsis thalia na]
172675	ATU034 615	ATL8C4 9896:7 42..1	nap				ATL8C4 9896:7 42..16 7	0.62	g34137 01	35	443	3.8e- 38	(AC004 747) hypoth etical protei n [Arabi dopsis thalia na]
172676	ATU034 616	ATL8S2 723:55 1..1	nap				ATL8S2 723:52 5..9	0.62	g31283 93	35	418	7.2e- 43	(AF028 019) ArfII; arabin osidas e [Cytop haga xylano lytica]
172677	ATU034	ATL8S1	nap				ATL8S1	0.62	g33580	35	415	1.4e-	(AB015

617	5332:1 ..523				5332:6 8..268	91	32	974) glycer ol kinase [Pseud omonas tolaas ii]
172678	ATU034 618	ATL8C2 2491:1 248..1	nap		ATL8C2 2491:1 119..1 06	0.61	650	(AC000 132) Simila r to A. thalia na recept or- like protei n kinase (gb RL K5_ARA TH). ESTs gb ATT S0475, gb ATT S4362 come from this gene. [Arabi dopsis thalia na]
172679	ATU034 619	ATL8S1 694:49 8..1	nap		ATL8S1 694:41 3..163	0.61	176	(AF119 621) unknown
						944550 82	1.7e- 16	

172680	ATU034 620	ATL8C2 5972:8 19..1	nap					ATL8C2 5972:8 10..11 4	0.61	g22449 96	35	1323	3.5e- 126	(Z9734 1) simila rity to a membra ne- associ ated salt- induci ble protei n [Arabi dopsis thalia na]
172681	ATU034 621	ATL8C3 0746:1 ..1594	nap					ATL8C3 0746:8 06..12 49	0.60	g45811 81	35	1025	1.1e- 90	(AC006 220) unknow n protei n [Arabi dopsis thalia na]
172682	ATU034 622	ATL8S1 1659:5 16..24 4	nap					ATL8S1 1659:4 71..29 1	0.60	g45824 55	35	225	3.7e- 18	(AC007 071) putati ve recept or

172683	ATU034 623	ATL8C1 346:17 73..1	nap						ATL8C1 346:10 76..41	0.60		g43097 65	35	1695	2.7e- 175	(AC006 217) putati ve retrot ranspo son polypr otein [Arabi dopsis thalia na]
172684	ATU034 624	ATL8C9 288:31 96..50 07	nap						ATL8C9 288:31 96..45 90	0.59		g48369 29	35	741		(AC006 085) Hypoth etical protei n [Arabi dopsis thalia na]
172685	ATU034 625	ATL8C4 1466:1 ..1115	nap						ATL8C4 1466:4 7..387	0.59		g46999 43	35	109	3.1e- 05	(AC007 166) hypoth etical protei n [Arabi dopsis thalia na]

172686	ATU034 626	ATL8S5 118:1. .593	nap			ATL8S5 118:23 ..565	0.59	g43369 32	35	405	6.4e- 29	(AF114 442) histid ine kinase ; HepK [Nosto c puncti forme]
172687	ATU034 627	ATL8S8 281:50 8..1	nap			ATL8S8 281:30 3..129	0.58	g24627 44	35	145	1.9e- 07	(AC002 292) Hypoth etical protei n [Arabi dopsis thalia na]
172688	ATU034 628	ATL8S2 3485:5 47..1	nap			ATL8S2 3485:5 47..37	0.58	g21043 96	35	180	7.6e- 12	(Z9539 0) bpoA [Mycob acteri um tuberc ulosis]
172689	ATU034 629	ATL8S2 7738:4 61..1	nap			ATL8S2 7738:3 81..32 7	0.58	g47411 89	35	178	5.3e- 13	(AL049 746) putati ve protei n [Arabi dopsis thalia na]
172690	ATU034	ATL8C3	nap			ATL8C3	0.57	g57133	35	1058	8.2e-	(U1103

	630	3777:1 ..1303						3777:6 04..12 12	0				114	4) ent- kauren e synthe tase A [Arabi dopsis thalia na]
172691	ATU034 631	ATL8C9 078:16 4..266 4	nap					ATL8C9 078:16 4..266 2	0.57	g28945 97	35	540		(AL021 889) bHLH protei n - like [Arabi dopsis thalia na]
172692	ATU034 632	ATL8C4 5992:1 631..2 911	nap					ATL8C4 5992:1 631..2 813	0.57	g36953 97	35	521	4.1e- 45	(AF096 372) No defini tion line found [Arabi dopsis thalia na]
172693	ATU034 633	ATL8C3 8713:2 31..86 8	nap					ATL8C3 8713:2 31..83 8	0.57	g36872 29	35	353	1.3e- 26	(AC005 169) hypothe tical protei n [Arabi dopsis thalia

172694	ATU034 634	ATL8S1 6326:1 60..60 0	nap				ATL8S1 6326:1 60..57 7	0.57	g33781 04	35	259	5.3e- 29	na] (AF047 473) testis mitoti c checkp oint BUB3 [Homo sapien s]
172695	ATU034 635	ATL8S1 8679:1 ..492	nap				ATL8S1 8679:4 0..130	0.56	g41806 4	35	560	4.1e- 51	THREON INE SYNTHA SE []
172696	ATU034 636	ATL8S1 0505:1 ..565	nap				ATL8S1 0505:4 5..288	0.56	g29838 60	35	258	1.2e- 20	(AE000 742) biotin carbox ylase [Aquif ex aeolic us]
172697	ATU034 637	ATL8S2 8610:9 5..467	nap				ATL8S2 8610:1 55..34 3	0.55	g38610 78	35	165	7.8e- 12	(AJ235 272) PEPTID E CHAIN RELEASE E FACTOR 1 (prfa) [Ricke ttsia prowaz ekil]
172698	ATU034	ATL8S2	nap				ATL8S2	0.55	g43788	35	351	1.9e-	(AF124

172699	638	0470:4 86..1					0470:4 74..12	53	32	349) ethano lamin permea se [Zymom onas mobili s]
	ATU034 639	ATL8C2 0155:1 ..391	nap				ATL8C2 0155:6 6..381	0.54	476	(AB018 074) simila r to chalco ne syntha se [Strep tomyce s griseu s]
172700	640	ATL8S2 2907:4 12..1	nap				ATL8S2 2907:4 12..27 4	0.54	281	(D8861 9) OSMYB3 [Oryza sativa]
172701	641	ATL8C1 5331:4 7..758	nap				ATL8C1 5331:1 09..75 8	0.54	686	(AC006 216) Simila r to [Arabi dopsis thalia na]
172702	642	ATL8C2 5777:1 675..8 53	nap				ATL8C2 5777:1 326..8 72	0.54	306	(AF024 635) NADPH cytoch

172703	ATU034 643	ATL8S1 123:54 9..1	nap					ATL8S1 123:41 9..298	0.54	g33675 26	35	273	3.0e- 24	rome P450 reduct ase [Petro selinu m crispu m] (AC004 392) Strong simila rity to [Arabi dopsis thalia nal]
172704	ATU034 644	ATL8C1 44:1.. 1206	nap					ATL8C1 44:473 ..1176	0.54	g49143 18	35	1358		(AC005 489) F14N23 .4 [Arabi dopsis thalia nal]
172705	ATU034 645	ATL8C3 1956:1 ..3296	nap					ATL8C3 1956:1 060..3 182	0.54	g45811 68, g47339 99	35, 32	2290, 127	1.3e- 230, 2.4e- 09	(AC006 220) hypoth etical protei n [Arabi dopsis thalia nal; (AC007 187) hypoth

172706	ATU034 646	ATL8C3 4400:1 317..1	nap					ATL8C3 4400:1 302..2 27	0.53		g30247 56	35	150	2.5e- 07	etical protei n [Arabi dopsis thalia na]
172707	ATU034 647	ATL8C8 705:22 47..21 6	nap					ATL8C8 705:19 02..27 4	0.53		g30236 52	35	80	1.5e- 06	PUTATI VE DNA POLYME RASE EPSILO N SUBUNI T B (DNA POLYME RASE II SUBUNI T B) [Caeno rhabdi tis elegan s]
172708	ATU034 648	ATL8C4 9204:2 638..2	nap					ATL8C4 9204:2 588..2	0.53		g29247 71	35	662	9.9e- 66	(AC002 334) putati

172709	ATU034 649	037	nap	ATL8S7 579:50 5..1	ATL8S7 579:50 5..205	0.52	g32876 87	35	123	6.1e- 15	(AC003 979) Match to sucros e- proton sympor ter (SUC2) gene gb X75 382 from A. thalia na. [Arabi dopsis thalia na]
172710	ATU034 650		nap	ATL8C5 244:76 4..126	ATL8C5 244:49 7..165	0.51	g22448 63	35	120	2.5e- 11	(Z9733 7) hypoth etical protei n [Arabi dopsis

172711	ATU034 651	ATL8C8 615:1. .1345	nap				ATL8C8 615:20 7..897	0.51	g22448 92	35	944	1.8e- 105	thalia nal (Z9733 8) simila rity to cycloa rtenol syntha se [Arabi dopsis thalia nal]
172712	ATU034 652	ATL8C3 8624:4 30..95 4	nap				ATL8C3 8624:4 67..92 8	0.51	g28800 54	35	432	1.2e- 46	(AC002 340) putati ve cytoch rome P450 [Arabi dopsis thalia nal]
172713	ATU034 653	ATL8C4 6522:6 51..1	nap				ATL8C4 6522:5 01..34 9	0.51	g34137 04	35	480	8.2e- 33	(AC004 747) hypoth etical protei n [Arabi dopsis thalia nal]
172714	ATU034 654	ATL8C2 6980:1 ..765	nap				ATL8C2 6980:2 11..58 7	0.50	g30633 92	35	288	3.0e- 23	(AB012 932) Ca2+/H +

172715	ATU034 655	ATL8S2 777:1. .592	nap					ATL8S2 777:27 8..251	0.49	g45876 79	35	553	7.8e- 56	exchan ger [Vigna radiat a]
														(AC007 197) unknow n protei n [Arabi dopsis thalia na]
172716	ATU034 656	ATL8S2 3594:4 86..1	nap					ATL8S2 3594:4 04..55	0.48	g33778 36	35	216	4.3e- 14	(AF075 598) contai ns simila rity to revers e transc riptas es [Arabi dopsis thalia na]
														ns simila rity to revers e transc riptas es [Arabi dopsis thalia na]
172717	ATU034 657	ATL8C3 3887:1 ..1818	nap					ATL8C3 3887:2 43..13 17	0.48	g26186 86	35	246		(AC002 510) hypoth etical protei n [Arabi dopsis thalia
														na]

172718	ATU034 658	ATL8C1 0924:1 203..7 60	nap				ATL8C1 0924:1 201..7 60	0.48	g49268 20	35	218	2.8e- 21	na] (AC004 135) T17H7. 5 [Arabi dopsis thalia na]
172719	ATU034 659	ATL8C7 78:189 4..1	nap				ATL8C7 78:189 4..249	0.48	g43357 31	35	889	7.0e- 105	(AC006 248) putati ve polypr otein [Arabi dopsis thalia na]
172720	ATU034 660	ATL8S2 5684:1 ..667	nap				ATL8S2 5684:1 67..34 4	0.48	g45672 96	35	629	2.6e- 59	(AC006 918) putati ve Athila retroe lement ORF1 protei n [Arabi dopsis thalia na]
172721	ATU034 661	ATL8C8 484:1. .769	nap				ATL8C8 484:38 2..758	0.47	g48862 70	35	508	6.5e- 29	(AL050 300) putati ve protei n [Arabi

172722	ATU034 662	ATL8S3 83:1.. 550	nap				ATL8S3 83:151 ..540	0.46	g38611 62	35	609	7.7e- 60	dopsis thalia na]
172723	ATU034 663	ATL8C2 5607:1 ..1012	nap				ATL8C2 5607:1 71..90 6	0.46	g45570 67	35	932	9.1e- 83	(AJ235 272) PROPIO NYL- COA CARBOX YLASE BETA CHAIN PRECUR SOR (pccB) [Ricke ttsia prowaz ekii]
172724	ATU034 664	ATL8C4 3040:1 ..1366	nap				ATL8C4 3040:1 52..10 53	0.46	g42494 19	35	241	1.2e- 20	(AC007 045) putati ve pol polypr otein [Arabi dopsis thalia na]

172725	ATU034 665	ATL8C5 906:32 ..1154	nap			ATL8C5 906:36 0..939	0.45	g21296 52	35	107	na] myosin heavy chain homolo g - Arabid opsis thalia na (fragm ent) [Arabi dopsis thalia na]
172726	ATU034 666	ATL8C2 5674:1 ..1391	nap			ATL8C2 5674:3 28..13 78	0.45	g39134 37	35	661	5.1e- 59 PUTATI VE PRE- MRNA SPLIC ING FACTOR ATP- DEPEND ENT RNA HELICA SE [Arabi dopsis thalia na]
172727	ATU034 667	ATL8C2 3821:1 ..998	nap			ATL8C2 3821:2 10..93 7	0.44	g21296 18	35	1039	1.9e- 85 hypoth etical protei n 1 - Arabid opsis thalia

172728	ATU034 668	ATL8C4 3986:1 95..68 1	nap				ATL8C4 3986:6 35..43 3	0.43	g28322 44	35	500		na retrot ranspo son Athila [Arabi dopsis thalia na]
172729	ATU034 669	ATL8C2 7292:9 09..1	nap				ATL8C2 7292:9 09..64	0.43	g38941 91	35	243		(AF031 569) hypoth etical protei n [Zea mays]
172730	ATU034 670	ATL8S9 928:39 9..1	nap				ATL8S9 928:29 7..107	0.43	g44068 04	35	333	8.9e- 27	(AC005 662) unknow n protei n [Arabi dopsis thalia na]
172731	ATU034 671	ATL8C4 1465:1	nap				ATL8C4 1465:2	0.42	g39351 64	35	1104	7.8e- 106	(AC006 304) prolin e iminop eptida se [Arabi dopsis thalia na]
													(AC004 557)

172732	ATU034 672	ATL8C4 4301:1 71..12 80	..1831						34..12 51	0.40	g36458 99	35	1644	2.0e- 170	F17L21 .7 [Arabi dopsis thalia nal]
		nap							ATL8C4 4301:1 77..12 50						(U6840 8) 5' end not determ ined experi mental ly [Zea mays]
172733	ATU034 673	ATL8C1 5026:1 ..1540									g45396 60	35	1733	1.2e- 162	(AF061 282) polypr oteins [Sorgh um bicolor r]
		nap													
172734	ATU034 674	ATL8C1 7116:1 362..1 255									g42204 78	35	96	1.8e- 06	(AC006 069) hypoth etical protei n [Arabi dopsis thalia nal]
		nap													
172735	ATU034 675	ATL8S2 2425:5 41..1									g24999 27	35	332	2.5e- 30	HYPOTH ETICAL ZINC PROTEA SE
		nap													

172740	ATU034 680	..943	nap							g27087 47	35	99	1.7e- 06	(AC003 952) putati ve glycin e- rich, zinc- finger DNA- bindin g protei n [Arabi dopsis thalia na]
172741	ATU034 681	ATL8C3 1396:1 294..9 80	nap							g15242 80	35	164	0.0008 1	(Z7970 2) rocE [Mycob acteri um tuberc ulosis]
172742	ATU034 682	ATL8C2 4721:2 340..1	nap							g35137 47	35	1394	1.8e- 119	(AF080 118) contai ns simila

172743	ATU034 683	ATL8C2 4883:4 434..5 024	nap								945672 96	35	940	2.5e- 76	(AC006 918) putati ve Athila retroee lement ORF1 protei n [Arabi dopsis thalia na]
172744	ATU034 684	ATL8C9 26:190 6..302 6	nap								942636 55	35	951	2.2e- 86	(AC006 136) putati ve revers e transc riptas e [Arabi

172745	ATU034 685	ATL8C3 1932:1 517..1	nap									g45389 01	35	1030	1.2e- 95	dopsis thalia nal (AL049 482) RNA- direct ed DNA polyme rase- like protei n [Arabi dopsis thalia nal]
172746	ATU034 686	ATL8C4 054:11 71..25 6	nap									g45672 94	35	714	7.1e- 54	(AC006 918) putati ve Athila retroee lement ORF1 protei n [Arabi dopsis thalia nal]
172747	ATU034 687	ATL8C4 9332:3 30..10 15	nap									g24627 56	35	1089	1.3e- 102	(AC002 292) putati ve recept or kinase [Arabi dopsis thalia nal]

172752	ATU034 692	ATL8C3 7886:1 ..1687	nap						ATL8C3 7886:1 34..15 95	1.00	g16335 72	34	172	3.0e- 16	(U5206 4) Herpes virus saimir i ORF73 homolo g [Kapos i's sarcom a- associ ated herpes virus]	[Arabi dopsis thalia na]
172753	ATU034 693	ATL8S1 3167:5 90..1	nap								g40005 4	35	718	1.3e- 69	DIHYDR OXY- ACID DEHYDR ATASE (DAD) [Lacto coccus lactis]	
172754	ATU034 694	ATL8S1 3362:1 ..158	nap								g17810 65	35	207	4.1e- 17	(Z8386 3) aroD [Mycob acteri um tuberc ulosis]	

172755	ATU034 695	ATL8C1 2800:6 91..95 6	nap						g45811 06	35	188	8.7e- 15	(AC005 825) putati ve n kinase [Arabi dopsis thalia na]
172756	ATU034 696	ATL8C1 0949:9 69..14 94	nap						g44067 96	35	578	7.4e- 51	(AC006 304) hypoth etical protei n [Arabi dopsis thalia na]
172757	ATU034 697	ATL8C3 3800:2 60..1	nap						g40069 04	35	269	2.3e- 23	(Z9970 8) putati ve MADS- box protei n [Arabi dopsis thalia na]
172758	ATU034 698	ATL8C8 421:53 7..11	nap						g33954 35	35	214	1.8e- 12	(AC004 683) myosin heavy chain- like protei

172759	ATU034 699	ATL8C4 3464:1 416..1 638	nap								g10763 16	35	113		n [Arabi dopsis thalia na]
															drough t- induce d protei n Di19 - Arabid opsis thalia na [Arabi dopsis thalia na]
172760	ATU034 700	ATL8S1 3678:5 29..1	nap								g34200 52	35	682	2.5e- 68	(AC004 680) putati ve ubiqin one reduct ase [Arabi dopsis thalia na]
172761	ATU034 701	ATL8C1 566:12 4..730	nap								g45809 90	35	361	4.1e- 25	(AF120 335) putati ve transp osase [Arabi dopsis na]

172762	ATU034 702	ATL8S2 111:12 2..398	nap							g25586 63	35	271	0.96	thalia nal (AC002 354) F6P23. 10.1 [Arabi dopsis thalia nal]
172763	ATU034 703	ATL8S5 846:1. .401	nap							g45858 72	35	290	1.7e- 21	(AC005 850) Hypoth etical protei n [Arabi dopsis thalia nal]
172764	ATU034 704	ATL8C2 6085:1 ..899	nap							g45672 93	35	82	0.0095	(AC006 918) putati ve Athila retroe lement ORF1 protei n [Arabi dopsis thalia nal]
172765	ATU034 705	ATL8C1 0793:1 007..3 84	nap							g38057 69	35	690	1.2e- 62	(AC005 693) putati ve mudR- like

172766	ATU034 706	ATL8S7 534:36 8..648	nap									g23426 85	35	128	3.5e- 11	transp oson [Arabi dopsis thalia nal (AC000 106) Contai ns simila rity to Rhodoc occus amidas e (gb D1 6207). ESTs gb T20 504,gb H3665 0,gb N 97423, gb H36 595 come from this gene. [Arabi dopsis thalia nal (AC002 311) Hypoth etical protei
172767	ATU034 707	ATL8S3 0931:5 04..1	nap									g28299 08	35	657	9.0e- 67	(AC002 311) Hypoth etical protei

172768	ATU034 708	ATL8C1 0644:1 ..1602	nap							g45443 72	35	1215		n [Arabi dopsis thalia na]
172769	ATU034 709	ATL8C8 556:1. .941	nap							g10762 81	35	846	2.6e- 79	(AC006 920) putati ve revers e transc riptas e [Arabi dopsis thalia na]
														1- phosph atidyl inosit ol- 4,5- bispho sphate phosph odiester erase (EC 3.1.4. 11) - Arabid opsis thalia na [Arabi dopsis thalia na]

172770	ATU034 710	ATL8S2 7142:2 72..52 3	nap							g11758 15	35	103	2.0e- 06	HYPOTH ETICAL PROTEI N HI1476 [Haemo philus influe nzae Rd]
172771	ATU034 711	ATL8C4 5694:1 34..92 1	nap							g44067 92	35	1245	8.7e- 129	(AC006 304) putati ve revers e transc riptas e [Arabi dopsis thalia nal]
172772	ATU034 712	ATL8C1 0428:1 397..1	nap							g42630 52	35	244		(AC005 142) putati ve revers e transc riptas e [Arabi dopsis thalia nal]
172773	ATU034 713	ATL8C4 3683:1 ..330	nap							g23427 27	35	209		(AC002 341) hypoth etical

172774	ATU034 714	ATL8C9 000:13 90..1	nap									g42063 06	35	2119	7.1e- 209	protein [Arabi dopsis thalia na]
172775	ATU034 715	ATL8C4 5746:2 287..1	nap									g38343 19	35	298	1.2e- 31	(AF049 110) prpol [Zea mays] (AC005 679) Simila r to [Arabi dopsis thalia na]
172776	ATU034 716	ATL8C1 0412:1 ..1832	nap									g42638 31	35	1833		(AC006 067) putati ve revers e transc riptas e [Arabi dopsis thalia na]
172777	ATU034 717	ATL8S1 8543:4 59..23 7	nap									g48862 86	35	182	2.1e- 17	(AL050 300) putati ve protei n [Arabi dopsis na]

172778	ATU034 718	ATL8C1 8198:6 65..20 2	nap							g45862 60	35	333	2.1e- 31	(AL049 640) putati ve protei n [Arabi dopsis thalia na]
172779	ATU034 719	ATL8C2 2538:1 770..1	nap							g48369 30	35	1681	5.3e- 157	(AC006 085) Hypoth etical protei n [Arabi dopsis thalia na]
172780	ATU034 720	ATL8C1 5939:1 400..1	nap							g21941 36	35	1567	1.5e- 153	(AC002 062) Strong simila rity to Zea mays retrot ranspo son Hopsc otch polypr oteins (gb U1 2626). [Arabi dopsis

172785	ATU034 725	ATL8C3 1822:3 42..1	nap							g11698 63	35	113	1.3e- 10	G-BOX BINDIN G FACTOR 4 [Arabi dopsis thalia na]	[Metha nobact erium thermo autotr ophicu m]
172786	ATU034 726	ATL8C3 9590:7 045..7 672	nap							g33273 90	35	559	9.6e- 52	(AC004 483) hypoth etical protei n [Arabi dopsis thalia na]	
172787	ATU034 727	ATL8S2 9026:5 59..1	nap							g43887 29	35	465	9.8e- 46	(AC006 413) hypoth etical protei n [Arabi dopsis thalia na]	
172788	ATU034 728	ATL8C4 6024:1 339..8 35	nap							g20886 51	35	232	2.5e- 20	(AF002 109) hypers ensiti	

172789	ATU034 729	ATL8C4 9600:1 298..1	nap									g37460 69	35	1109	1.6e- 103	(AC005 311) putati ve revers e transc riptas e [Arabi dopsis thalia na]
172790	ATU034 730	ATL8S2 1687:1 ..330	nap									g45811 66	35	104	0.037	(AC006 220) hypoth etical protei n [Arabi dopsis thalia na]
172791	ATU034 731	ATL8S1 5182:3 24..1	nap									g19222 42	35	71	0.013	(Y1008 4) hypoth etical protei n [Arabi dopsis na]

172795	ATU034 735	ATL8C1 8835:1 13..66 1	nap							g42636 58	35	598	1.5e- 30	(AC006 136) hypoth etical protei n [Arabi dopsis thalia na]
172796	ATU034 736	ATL8C4 1429:1 615..2 064	nap							g44902 94	35	318	2.7e- 16	(AL035 678) WD- repeat protei n-like protei n [Arabi dopsis thalia na]
172797	ATU034 737	ATL8C3 7705:8 15..1	nap							g47536 46	35	549	1.7e- 54	(AL049 751) putati ve protei n (possi bly fragme nt) [Arabi dopsis thalia na]
172798	ATU034 738	ATL8C4 2335:1 ..1142	nap							g33193 52	35	168	2.2e- 13	(AF077 407) No defini

172799	ATU034 739	ATL8C4 4744:1 ..1078	nap										g44552 40	35	807	1.3e- 64	(AL035 523) putati ve protei n [Arabi dopsis thalia na]
172800	ATU034 740	ATL8C3 9117:8 99..51 8	nap										g36872 37	35	527	8.7e- 51	(AC005 169) putati ve Cys3Hi s zinc- finger protei n [Arabi dopsis thalia na]
172801	ATU034 741	ATL8S2 7832:5 81..1	nap										g13510 5	35	338	2.5e- 33	GLUTAM YL- TRNA SYNTH TASE (GLUTA MATE-- TRNA LIGASE

172802	ATU034 742	ATL8C1 7263:1 ..1253	nap								g45393 73	35	1471	8.7e- 152	(AL049 525) putati ve retrot ranspo son polypr otein [Arabi dopsis thalia na]	(GLURS) [Bacil lus stearo thermo philus ,]
172803	ATU034 743	ATL8C1 394:10 92..14 37	nap								g26232 97	35	353	2.5e- 28	(AC002 409) unknow n protei n [Arabi dopsis thalia na]	(AC006 955) hypoth etical protei n [Arabi dopsis thalia na]
172804	ATU034 744	ATL8C1 9400:4 39...23 8	nap								g45444 33	35	80	0.040	(AC006 955) hypoth etical protei n [Arabi dopsis thalia na]	(AC006 955) hypoth etical protei n [Arabi dopsis thalia na]

172805	ATU034 745	ATL8S7 193:24 7..1	nap							g12001 61	35	88	2.9e- 06	thalia nal (X9565 0) tonopl ast intrin sic protei n [Tulip a gesner iana]
172806	ATU034 746	ATL8C1 6381:3 33..1	nap							g22449 60	35	203	3.1e- 14	(Z9734 0) simila rity to copia- like retrot ranspo son [Arabi dopsis thalia nal]
172807	ATU034 747	ATL8C4 5972:6 39..1	nap							g31842 77	35	1138	4.2e- 115	(AC004 136) hypoth etical protei n [Arabi dopsis thalia nal]
172808	ATU034 748	ATL8C1 8142:1	nap							g37460 69	35	1471	9.6e- 147	(AC005 311)

172815	ATU034 755	ATL8C3 6265:1 ..764	nap										g42622 28	35	467	7.1e- 32	ulosis 1 (AC006 200) putati ve recept or protei n kinase [Arabi dopsis thalia nal (AF105 716) gag protei n [Zea mays]
172816	ATU034 756	ATL8C1 6046:5 33..14 85	nap										g44163 01	35	993	4.5e- 98	(AF105 716) gag protei n [Zea mays]
172817	ATU034 757	ATL8C1 3210:4 56..1	nap										g44690 08	35	196	1.0e- 14	(AL035 602) UDP rhamno se-- anthoc yanidi n-3- glucos ide rhamno syltra nsfera se- like protei n [Arabi

172818	ATU034 758	ATL8C3 9304:3 84..1	nap							g39156 39	35	170	1.0e- 16	dopsis thalia nal ALTERN ATIVE OXIDAS E 1A PRECUR SOR [Arabi dopsis thalia nal]
172819	ATU034 759	ATL8S1 5010:1 ..473	nap							g34618 17	35	189	3.3e- 20	(AC004 138) unknow n protei n [Arabi dopsis thalia nal]
172820	ATU034 760	ATL8S2 2781:2 99..54 9	nap							g14061 4	35	134	8.4e- 12	HYPOTH ETICAL 26.4 KD PROTEI N IN RUV- ASPS INTERG ENIC REGION [Esche richia coli]
172821	ATU034 761	ATL8S9 271:1. .484	nap							g43712 80	35	108	9.5e- 11	(AC006 260) hypo

172822	ATU034 762	ATL8C3 756:97 4..212	nap							g34026 72	35	875	6.2e- 89	etical protei n [Arabi dopsis thalia nal] (AC004 697) putati ve white protei n [Arabi dopsis thalia nal]
172823	ATU034 763	ATL8C1 7024:1 121..5 50	nap							g48039 60	35	128	6.6e- 09	(AC006 202) putati ve carbon ic anhydr ase [Arabi dopsis thalia nal]
172824	ATU034 764	ATL8C1 6034:1 ..853	nap							g27813 58	35	66	8.4e- 05	(AC003 113) F2401. 14 [Arabi dopsis thalia nal]
172825	ATU034 765	ATL8C3 2337:1	nap							g45824 68	35	319	3.7e- 29	(AC007 071)

172826	ATU034 766	ATL8S2 4862:5 29..22 0	nap							g26497 76	35	157	8.7e- 09	putative 40S ribosomal protein; contains C-terminal domain [Arabis dopsis thaliana]
172827	ATU034 767	ATL8C1 601:88 1..1	nap							g38343 18	35	125	0.96	(AE001047) branched-chain amino acid ABC transporter, permeal protein (brad-2) [Archaeoglobus fulgidus]
														(AC005679) Similator to

172828	ATU034 768	ATL8C1 234:20 20..23 02	nap									g47739 10	35	344	1.4e- 16	[Arabi dopsis thalia na] (AF147 259) No defini tion line found [Arabi dopsis thalia na]
172829	ATU034 769	ATL8C3 7624:1 ..1603	nap									g42356 44	35	844	6.8e- 89	(AF119 040) polypr oteins [Lycop ersico n escule ntum]
172830	ATU034 770	ATL8C4 6142:4 33..84 2	nap									g46789 34	35	318	2.8e- 31	(AL049 711) putati ve protei n [Arabi dopsis thalia na]
172831	ATU034 771	ATL8C4 2309:1 ..2056	nap									g33193 72, g45220 05	35, 31	467, 875	3.0e- 39, 4.8e- 74	(AF077 409) simila r to revers e

172834	ATU034 774	ATL8C7 201:92 3..188	nap										g47551 94	35	249	5.8e- 28	(AC007 018) hypoth etical protein [Arabi dopsis thalia na]	probab le transc riptio nal adapto r ADA2 [Arabi dopsis thalia na]
172835	ATU034 775	ATL8C1 4903:1 450..5 45	nap										g45393 35	35	361	1.9e- 26	(AL035 539) putati ve protein [Arabi dopsis thalia na]	
172836	ATU034 776	ATL8C8 025:19 41..82 0	nap										g57730 3	35	383	2.2e- 47	(D4204 5) The ha3611 gene produc t is relate d to S.cere	

172841	ATU034 781	ATL8C4 1752:1 2809.. 13087	nap										g47739 10	35	323	1.7e- 26	[Arabi dopsis thalia na] (AF147 259) No defini tion line found [Arabi dopsis thalia na]
172842	ATU034 782	ATL8C9 501:11 23..1	nap										g17032 19	35	205	9.7e- 16	AIG1 PROTEI N [Arabi dopsis thalia na]
172843	ATU034 783	ATL8C1 9859:7 13..13 05	nap										g54432 5	35	143	6.9e- 10	DIMETH YLANIL INE MONOOX YGENAS E (N- OXIDE FORMIN G) 3 (HEPAT IC FLAVIN - CONTAI NING MONOOX YGENAS E 3)

		44..19 91															No defini tion line found [Arabi dopsis thalia na]
172847	ATU034 787	ATL8C3 2400:1 986..1	nap											35, 34	364, 139	1.2e- 36, 3.3e- 11	(AC007 134) hypoth etical protei n [Arabi dopsis thalia na]; (Y1847 1) SINALP [Vitis vinife ra]
172848	ATU034 788	ATL8C7 714:20 60..16 94	nap											35	213	2.6e- 17	(AC005 496) DNAJ- like protei n [Arabi dopsis thalia na]
172849	ATU034 789	ATL8C1 3641:4 47..1	nap											35	152	0.0004 1	(AC006 234) hypoth etical protei

172856	ATU034 796	ATL8S1 4506:1 ..350	nap						g30470 81	35	200	3.1e- 17	(AF058 914) contai ns simila rity to revers e- transc riptas e-like protei ns [Arabi dopsis thalia na]
172857	ATU034 797	ATL8S2 3036:5 7..401	nap						g44907 18	35	65	0.26	(AL035 709) bZIP transc riptio n factor -like protei n [Arabi dopsis thalia na]
172858	ATU034 798	ATL8C9 135:63 9..109 4	nap						g25641 12	35	415		(AF000 371) UDP glucos e:flav onoid 3-O- glucos

172859	ATU034 799	ATL8C4 4963:1 34..17 22	nap										g31526 05	35	129	1.9e- 11	yltran sferas e [Vitis vinife ra] (AC004 482) hypoth etical protei n [Arabi dopsis thalia na]
172860	ATU034 800	ATL8C1 50:1.. 876	nap										g45104 26	35	595		(AC006 929) hypoth etical protei n [Arabi dopsis thalia na]
172861	ATU034 801	ATL8C1 1731:1 254..5 44	nap									ATL8C1 1731:1 107..5 50	0.99	34	265	1.8e- 25	(AC002 292) putati ve recept or kinase [Arabi dopsis thalia na]
172862	ATU034 802	ATL8C7 088:65 1..1	nap									ATL8C7 088:25 7..30	0.99	34	427	1.2e- 42	(AC005 560) putati

172867	ATU034 807	..508	1..507	nap	ATL8C4 0627:6 18..1	ATL8C4 0627:6 11..71	0.97	g29613 55	34	259	6.4e- 19	syntax in- related protein n At- SYR1 [Arabi dopsis thalia na]
172868	ATU034 808	ATL8C3 8162:1 ..520	ATL8C3 8162:1 20..46 8	nap	ATL8C3 8162:1 20..46 8	ATL8C3 8162:1 20..46 8	0.97	g17032 19	34	76	0.30	AIG1 PROTEI N [Arabi dopsis thalia na]
172869	ATU034 809	ATL8S1 9170:1 ..565	ATL8S1 9170:5 06..36 6	nap	ATL8S1 9170:5 06..36 6	ATL8S1 9170:5 06..36 6	0.96	g34200 58	34	127	4.0e- 10	(AC004 680) unknown protein n [Arabi dopsis thalia na]
172870	ATU034	ATL8C4	ATL8C4	nap	ATL8C4	ATL8C4	0.96	g43253	34	741	7.8e-	(AF128

172871	ATU034 811	ATL8C4 4635:1 ..1689	nap					5234:1 280..1	5234:1 000..8 85					54				69	395) contai ns simila rity to retrov irus- relate d polypr oteins and to CCHC zinc finger protei n (Pfam: PF0009 8, Score= 16.3, E=0.05 1, E= 1) [Arabi dopsis thalia na]
																			(Z9733 7) hypoth etical protei n [Arabi dopsis thalia na]

172872	ATU034 812	ATL8S1 6440:5 00..1	nap			ATL8S1 6440:3 97..29	0.95	g26212 38	34	314	5.4e- 16	(AE000 806) glutam ate syntha se (NADPH) , alpha subuni t [Metha nobact erium thermo autotr ophicu m]
172873	ATU034 813	ATL8S2 7812:5 09..5	nap			ATL8S2 7812:4 28..5	0.95	g48848 60	34	118	0.0012	(AF133 118) nuclei c acid bindin g protei n [Oryza sativa j]
172874	ATU034 814	ATL8C4 3580:1 993..1 476	nap			ATL8C4 3580:1 724..1 476	0.95	g44552 28	34	193		(AL035 440) putati ve protei n [Arabi dopsis thalia na]
172875	ATU034	ATL8C1	nap			ATL8C1	0.94	g30154	34	564	5.0e-	(U5847

815	4351:1 005..1 96					4351:8 72..19 6	0.94	g36418 36	34	964	54	4) recept or- like protei n kinase [Lycop ersico n escule ntum] (AL023 094) putati ve serine /threo nine protei n kinase [Arabi dopsis thalia na]
172876	ATU034 816	ATL8C3 8294:1 ..1028	nap			ATL8C3 8294:3 09..98 6	0.94	g36418 36	34	964	4.0e- 70	(Z9720 9) hypoth etical protei n [Schiz osacch aromyc es pombe]
172877	ATU034 817	ATL8S2 0114:1 0..625	nap			ATL8S2 0114:1 0..599	0.94	g22391 96	34	169	1.9e- 16	(AC006 533) hypoth
172878	ATU034 818	ATL8C3 3016:1 863..7	nap			ATL8C3 3016:1 677..7	0.94	g48877 62	34	992	5.0e- 70	

172879	ATU034 819	65	ATL8C2 0499:9 72..24	nap				65	0.94	g17857 51	34	229	1.9e- 16	etical protei n [Arabi dopsis thalia na]
172880	ATU034 820	65	ATL8C2 4666:4 52..12 60	nap				ATL8C2 4666:4 52..12 60	0.94	g48369 31	34	438	7.0e- 49	(Y0850 2) orf164 [Arabi dopsis thalia na]
172881	ATU034 821		ATL8C4 167:1. .463	nap				ATL8C4 167:19 9..376	0.94	g43143 84	34	333	1.1e- 34	(AC006 232) putati ve cystei ne protei nase [Arabi dopsis thalia na]
172882	ATU034 822		ATL8C4 1463:1 ..1156	nap				ATL8C4 1463:5 27..11 09	0.93	g43097 55	34	238	1.4e- 17	(AC006 217) putati ve

172883	ATU034 823	ATL8C2 8904:5 31..75 6	nap							ATL8C2 8904:5 31..70 7	0.93			g44067 58	34	302	8.7e- 28	transp osase [Arabi dopsis thalia na] (AC006 836) hypo thetical protei n [Arabi dopsis thalia na]
172884	ATU034 824	ATL8C3 1352:5 94..1	nap							ATL8C3 1352:5 23..58	0.92			g22582 1	34	101	2.6e- 05	protei n A [Staph ylococ cus aureus]
172885	ATU034 825	ATL8C2 3342:1 ..1504	nap							ATL8C2 3342:2 ..1079	0.92			g45396 60	34	1737	2.5e- 183	(AF061 282) polypr oteins [Sorgh um bicol or]
172886	ATU034 826	ATL8C4 7571:1 ..1077	nap							ATL8C4 7571:3 83..10 24	0.92			g45875 24	34	844	1.5e- 90	(AC007 060) T5I8.1 3 [Arabi dopsis thalia na]
172887	ATU034	ATL8C4	nap							ATL8C4	0.92			g23885	34	488	1.0e-	(AC000

172891	ATU034 831	ATL8C4 6017:2 91..10 66	nap						0.90	g32427 04	34	186	6.9e- 20	[Arabi dopsis thalia na] (AC003 040) hypoth etical protei n [Arabi dopsis thalia na]
172892	ATU034 832	ATL8C4 0859:1 340..1	nap						0.90	g30804 38	34	772	4.1e- 67	(AL022 605) putati ve protei n [Arabi dopsis thalia na]
172893	ATU034 833	ATL8C1 1860:1 ..656	nap						0.89	g41917 78	34	250	6.9e- 05	(AC005 917) putati ve nucleo some assemb ly protei n I [Arabi dopsis thalia na]
172894	ATU034 834	ATL8C1 5059:1	nap						0.89	g46801 80	34	703	3.8e- 70	(AF111 709) [Arabi dopsis thalia na]

172895	ATU034 835	..989	nap				11..82 8	0.89	g34200 47	34	156			polypr otein [Oryza sativa subsp. indica]
	ATL8C1 7996:1 ..1518						ATL8C1 7996:6 6..151 8							(AC004 680) putati ve protei n kinase [Arabi dopsis thalia na]
172896	ATU034 836	ATL8S2 7413:1 ..572	nap				ATL8S2 7413:7 0..554	0.89	g17300 99	34	333		3.4e- 32	PUTATI VE LONG- CHAIN- FATTY- ACID-- COA LIGASE (LONG- CHAIN ACYL- COA SYNTHE TASE) (LACS) [Mycob acteri um tuberc ulosis]
172897	ATU034	ATL8C4	nap				ATL8C4	0.89	g23263	34	382		3.2e-	(Y1118

837	0490:7 80..1						0490:7 06..48		42				33	7) Terpen e cyclas e, TC1 [Arabi dopsis thalia na]
172898	ATU034 838	ATL8C3 4178:1 ..880	nap				ATL8C3 4178:5 84..83 7	0.89	g28424 93	34	347	4.7e- 36	(AL021 749) predic ted protei n [Arabi dopsis thalia na]	
172899	ATU034 839	ATL8C3 2734:1 232..1	nap				ATL8C3 2734:1 164..2 12	0.88	g30753 98	34	485	6.1e- 47	(AC004 484) unknow n protei n [Arabi dopsis thalia na]	
172900	ATU034 840	ATL8S1 9411:4 45..1	nap				ATL8S1 9411:3 18..30	0.88	g42621 43	34	543	4.8e- 47	(AC005 275) hypoth etical protei n [Arabi dopsis thalia na]	
172901	ATU034	ATL8C1	nap				ATL8C1	0.88	g43097	34	122	2.4e-	(AC006	

172902	841	4812:3 6..243 9					4812:3 6..150 0	03				05	266) putati ve transp oson protei n [Arabi dopsis thalia na]
	ATU034 842	ATL8C1 473:1. .1330	nap				ATL8C1 473:63 ..1085	0.87	g37859 75	34	152	7.6e- 09	(AC005 560) hypoth etical protei n [Arabi dopsis thalia na]
172903	ATU034 843	ATL8C3 2445:8 99..1	nap				ATL8C3 2445:4 29..13 9	0.87	g33193 71	34	764	6.8e- 79	(AF077 409) Simila r to pectin estera se; T24M8. 6 [Arabi dopsis thalia na]
172904	ATU034 844	ATL8C3 9461:1 ..620	nap				ATL8C3 9461:7 6..582	0.87	g17060 82	34	468	6.7e- 41	SERINE CARBOX YPEPTI DASE II-3 PRECUR

172905	ATU034 845	ATL8C1 3680:9 50..1	nap						ATL8C1 3680:8 79..12 4	0.87	g45444 22	34	727	2.8e- 76	(AC006 955) putati ve fimbri n [Arabi dopsis thalia na]	SOR (CP- MII.3) [Horde um vulgar ej]
172906	ATU034 846	ATL8C3 7552:8 46..1	nap						ATL8C3 7552:7 95..40	0.87	g42398 79	34	610	1.2e- 60	(AB016 780) Glutam ine:fr uctose -6- phosph ate amidot ransfe rase 2 [Mus muscul us]	
172907	ATU034 847	ATL8C4 8974:1 ..1317	nap						ATL8C4 8974:6 40..12 94	0.86	g22449 52	34	293	4.8e- 16	(Z9734 0) strong simila rity to ZK688. 3 protei	

172908	ATU034 848	ATL8C1 8763:7 93..13 45	nap						ATL8C1 8763:8 28..13 25	0.86	g42635 45	34	623	6.5e- 56	(AC006 250) putati ve Athila retro element ORF1 protei n [Arabi dopsis thalia na]
172909	ATU034 849	ATL8C1 9852:1 ..1830	nap						ATL8C1 9852:5 ..1830	0.86	g46462 08	34	1579	3.5e- 138	(AC007 230) Contai ns simila rity to F13P17 .8 []
172910	ATU034 850	ATL8S2 8385:1 ..511	nap						ATL8S2 8385:7 5..418	0.86	g18699 96	34	208	1.6e- 12	(Z9253 9) hypoth etical protei n Rv1032

172911	ATU034 851	ATL8S1 9718:1 ..608	nap					ATL8S1 9718:1 90..53 5	0.86		g26357 78	34	533	2.7e- 49	(Z9912 0) simila r to butyry l-CoA dehydr ogenas e [Bacil lus subtil is]	C [Mycob acteri um tuberc ulosis]
172912	ATU034 852	ATL8C1 7261:1 825..1	nap					ATL8C1 7261:1 692..1 97	0.86		g40564 37	34	442	2.6e- 35	(AC005 990) Strong simila rity to PFAM PF1000 69 Eukary otic protei n kinase domain . [Arabi dopsis thalia na]	C [Mycob acteri um tuberc ulosis]

172913	ATU034 853	ATL8C2 6281:1 393..7 10	nap			ATL8C2 6281:1 144..7 10	0.85	g16695 1	34	323	3.9e- 15	(L0609 4) polyga lactur onase [Perse a americ anal]
172914	ATU034 854	ATL8C1 154:1. .1085	nap			ATL8C1 154:13 5..995	0.85	g45593 39	34	767	3.2e- 81	(AC007 087) putati ve ATP- depend ent RNA helica se [Arabi dopsis thalia nal]
172915	ATU034 855	ATL8S2 6401:3 73..1	nap			ATL8S2 6401:3 73..24 1	0.85	g58686 0	34	87		HYPOTH ETICAL 24.1 KD PROTEI N IN SERS- DNAZ INTERG ENIC REGION [Bacil lus subtil is]
172916	ATU034 856	ATL8C3 2951:2	nap			ATL8C3 2951:2	0.85	g47738 92	34	1238	7.6e- 75	(AF076 243)

172917	ATU034 857	ATL8C3 4219:1 ..1633	nap					552..1 045	0.85	g29470 71	34	246	8.1e- 28	hypoth etical protei n [Arabi dopsis thalia na]
172918	ATU034 858	ATL8S2 6981:2 3..626	nap					ATL8S2 6981:6 2..566	0.85	g38614 03	34	454		(AC002 521) hypoth etical protei n [Arabi dopsis thalia na]
172919	ATU034 859	ATL8S3 0115:4 74..1	nap					ATL8S3 0115:4 74..72	0.85	g39145 32	34	206	2.3e- 16	(AJ235 273) DNA MISMAT CH REPAIR PROTEI N MUTL (mutL) [Ricke ttsia prowaz ekiil]
														S- ADENOS YLMETH IONINE :TRNA RIBOSY LTRANS FERASE _

172920	ATU034 860	ATL8C1 8287:1 549..1	nap						ATL8C1 8287:1 526..5 6	0.85	g46801 79	34	1684	5.4e- 170	ISOMER ASE (QUEUO SINE BIOSYN THESIS PROTEI N QUEA) [Bacil lus subtil is]
172921	ATU034 861	ATL8C4 9368:8 11..13 30	nap						ATL8C4 9368:8 11..13 26	0.84	g44688 03	34	560	3.9e- 39	(AL035 601) cytoch rome P450- like protei n [Arabi dopsis thalia na]
172922	ATU034 862	ATL8C1 1720:1 253..1 886	nap						ATL8C1 1720:1 331..1 877	0.84	g45389 97	34	241	1.4e- 20	(AL049 481) AIGI- like protei n

172923	ATU034 863	ATL8C4 2544:1 815..1	nap						ATL8C4 2544:1 815..6 37	0.84	g44328 66	34	2249	2.7e- 198	[Arabi dopsis thalia na] (AC006 300) putati ve revers e transc riptas e [Arabi dopsis thalia na]
172924	ATU034 864	ATL8C1 1433:1 ..1592	nap						ATL8C1 1433:1 04..12 62	0.83	g45126 67	34	486	7.9e- 35	(AC006 931) putati ve MAP kinase [Arabi dopsis thalia na]
172925	ATU034 865	ATL8C1 3173:5 14..13 98	nap						ATL8C1 3173:5 14..13 53	0.83	g34510 76	34	1336	7.3e- 141	(AL031 326) putati ve protei n [Arabi dopsis thalia na]
172926	ATU034 866	ATL8S6 23:408 ..1	nap						ATL8S6 23:319 ..14	0.83	g59807 3	34	233	7.6e- 26	(L3680 6) GT- 1 [Arabi

172927	ATU034 867	ATL8C2 9514:1 ..1294	nap					ATL8C2 9514:1 79..12 22	0.82	g37765 59	34	769	5.6e- 47	dopsis thalia nal (AC005 388) Strong simila rity to gene F14J9. 26 [Arabi dopsis thalia nal
172928	ATU034 868	ATL8S1 0823:1 ..428	nap					ATL8S1 0823:2 4..428	0.82	g25067 51	34	106	5.7e- 09	HYPOTH ETICAL 41.3 KD PROTEI N CY02B1 0.31C [Mycob acteri um tuberc ulosis]
172929	ATU034 869	ATL8S1 1390:3 99..1	nap					ATL8S1 1390:3 96..19	0.82	g24956 34	34	177	4.7e- 11	HYPOTH ETICAL 43.3 KD PROTEI N IN EVGS- GLK INTERG ENIC

172930 172931 172932
 172930 172931 172932
 172930 172931 172932

172930	ATU034 870	ATL8C7 782:11 73..1	nap						0.82	g29807 66	34	648	6.1e- 68	REGION [Esche richia coli] (AL022 198) putati ve calmod ulin- bindin g protei n [Arabi dopsis thalia na]
172931	ATU034 871	ATL8S9 254:1. .540	nap						0.82	g17810 98	34	444	1.6e- 36	(Z8386 4) gltD [Mycob acteri um tuberc ulosis J]
172932	ATU034 872	ATL8C3 5672:1 ..722	nap						0.81	g43224 75	34	61	0.0001 3	(AF086 642) putati ve MADS box transc riptio n factor ETL [Eucal yptus

172933	ATU034 873	ATL8S2 1160:3 73..1	nap					ATL8S2 1160:3 73..66	0.81	g26456 97	34	399	4.3e- 25	globul us subsp. globul us]
172934	ATU034 874	ATL8C4 1423:1 ..1051	nap					ATL8C4 1423:3 1..989	0.81	g34260 46	34	580	1.2e- 44	(AF031 940) alcohol dehydr ogenase [Sinor hizobium meliloti]
172935	ATU034 875	ATL8S2 8347:6 13..1	nap					ATL8S2 8347:5 24..36	0.80	g73183 6	34	351	9.8e- 36	(AC005 168) similars to salt-inducible protein [Arabis dopsis thaliana]
														PROBAB LE MANNOS YLTRAN SPERAS E KTR7 [Saccharomyc es cerevisiae]

172936	ATU034 876	ATL8C3 56:263 ..1097	nap				ATL8C3 56:263 ..949	0.80	g42204 56	34	460	1.2e- 34	siae] (AC006 216) Strong simila rity to [Arabi dopsis thalia na]
172937	ATU034 877	ATL8C4 8410:1 607..3 37	nap				ATL8C4 8410:1 519..3 37	0.80	g33353 33	34	325	1.3e- 27	(AC004 512) Simila r to chloro plast membra ne- associ ated 30KD protei n precur sor (IM30) gb M73 744 from Pisum sativu m. ESTs gb N37 557, gb W43 887 and gb AA0

172938	ATU034 878	ATL8S2 782:1. .532	nap					ATL8S2 782:69 ..503	0.80		927803 48	34	687	3.1e- 62	(AB000 094) inorga nic phosph ate transp orter [Arabi dopsis thalia na]
172939	ATU034 879	ATL8C4 2012:7 485..5 710	nap					ATL8C4 2012:7 058..5 856	0.79		945443 72	34	1282	4.3e- 129	(AC006 920) putati ve revers e transc riptas e [Arabi dopsis thalia na]
172940	ATU034 880	ATL8C9 985:10 93..1	nap					ATL8C9 985:77 3..57	0.79		922138 82	34	396	2.3e- 20	(AF004 165) 2- isopro pylmal ate

172941	ATU034 881	ATL8C2 8284:1 ..1260	nap						ATL8C2 8284:5 91..11 13	0.79	g45859 19	34	193	2.1e- 21	(AC007 211) asPF1 protein [Arabi dopsis thalia na]	syntha se [Lycop ersico n pennel lil]
172942	ATU034 882	ATL8C1 6103:1 ..2622	nap						ATL8C1 6103:5 8..252 3	0.78	g22451 19	34	2021	1.8e- 137	(Z9734 3) unname d protei n produc t [Arabi dopsis thalia na]	syntha se [Lycop ersico n pennel lil]
172943	ATU034 883	ATL8S2 5618:6 29..1	nap						ATL8S2 5618:5 50..12 9	0.78	g44328 67	34	342	1.8e- 22	(AC006 300) putati ve dnaJ- like protei n [Arabi dopsis thalia na]	syntha se [Lycop ersico n pennel lil]

172944	ATU034 884	ATL8C2 001:77 2..1	nap			ATL8C2 001:66 4..166	0.78	g49143 45	34	300	6.7e- 30	(AC005 489) F14N23 .31 [Arabi dopsis thalia na]
172945	ATU034 885	ATL8C4 7942:9 53..1	nap			ATL8C4 7942:9 24..33 1	0.78	g43888 25	34	1096	3.2e- 79	(AC006 528) putati ve pol polypr oteins with revers e transc riptas e domain (Pfam: PF0007 8) [Arabi dopsis thalia na]
172946	ATU034 886	ATL8C2 0293:1 503..5 87	nap			ATL8C2 0293:1 423..5 87	0.78	g25586 64	34	1339	4.3e- 120	(AC002 354) hypoth etical protei n [Arabi dopsis thalia na]
172947	ATU034 887	ATL8C5 267:71	nap			ATL8C5 267:62	0.78	g23160 24	34	337	3.9e- 25	(U9640 0)

172948	ATU034 888	0..189	nap	ATL8C4 7277:1 ..1654	ATL8C4 7277:1 0..150 5	0.78	g48501 82	34	142	2.3e- 05	(U4153 4) Contai ns simila rity to Pfam domain : PF0027 1 (helic ase_C) , Score= 49.0, E- value= 3.3e- 11, N=1 [Caeno rhabdi tis elegan s]
172949	ATU034 889	ATL8S3 0058:3 97..13 8	nap	ATL8S3 0058:3 38..16 5	ATL8S3 0058:3 38..16 5	0.77	g11512 4	34	245	4.1e- 22	HIGH- AFFINI TY BRANCH

172952	ATU034 892	ATL8C4 2071:1 360..1 43	nap				ATL8C4 2071:1 331..1 43	0.77	g42635 48	34	155	3.9e- 17	dopsis thalia nal (AC006 250) putati ve En/Spm transp oson protei n (mosai c protei n) [Arabi dopsis thalia nal
172953	ATU034 893	ATL8C7 343:1. .1025	nap				ATL8C7 343:22 5..495	0.77	g30368 09	34	791	2.3e- 60	(AL022 373) putati ve protei n [Arabi dopsis thalia nal
172954	ATU034 894	ATL8S1 3967:4 72..1	nap				ATL8S1 3967:4 28..75	0.77	g27915 02	34	308	4.4e- 29	(AL021 246) tig [Mycob acteri um tuberc ulosis]
172955	ATU034	ATL8C1	nap				ATL8C1	0.77	g13451	34	751	1.5e-	(U4702

172956	895	0934:1 949..1	nap				0934:1 859..7 1	0.76	g11768 42	34	228	31	9) ERECTA [Arabi dopsis thalia na]
	ATU034 896	ATL8S2 1326:6 11..1	nap				ATL8S2 1326:6 11..11 3				2.1e- 21		HYPOTH ETICAL 35.2 KD PROTEI N IN MURA- RPN INTERG ENIC REGION (O328) [Esche richia coli]
172957	ATU034 897	ATL8C6 173:1. .943	nap				ATL8C6 173:12 0..928	0.76	g45811 64	34	1239	6.9e- 125	(AC006 220) putati ve polypr otein [Arabi dopsis thalia na]
172958	ATU034 898	ATL8S9 880:1. .575	nap				ATL8S9 880:19 1..545	0.76	g26215 37	34	300	2.5e- 29	(AE000 831) sensor y transd uction histid ine kinase

172959	ATU034 899	ATL8C2 0527:1 ..716	nap					ATL8C2 0527:4 37..7	0.76	g33866 10	34	458	4.5e- 47	(AC004 665) hypoth etical protei n [Arabi dopsis thalia nal]	[Metha nobact erium thermo autotr ophicu m]
172960	ATU034 900	ATL8C4 8155:7 19..1	nap					ATL8C4 8155:6 66..37	0.76	g41814 1	34	97	9.8e- 06	TRICAR BOXYLA TE TRANSP ORT PROTEI N PRECUR SOR (CITRA TE TRANSP ORT PROTEI N) (CTP) (TRICA RBOXYL ATE CARRIE R PROTEI N)	

172961	ATU034 901	ATL8C3 8446:1 ..1064	nap							ATL8C3 8446:2 95..96 8	0.76	g22447 85	34	444	4.3e- 40	[Rattus norvegicus] (Z9733 5) hypothetical protein [Arabidopsis thaliana]
172962	ATU034 902	ATL8C2 0700:1 05..11 81	nap							ATL8C2 0700:1 05..11 40	0.76	g21911 93	34	1260	2.8e- 131	(AF007 271) contains similarity to type 1 inositol 1,4,5- triphosphate receptors [Arabidopsis thaliana]
172963	ATU034 903	ATL8C1 9358:2 06..19 33	nap							ATL8C1 9358:3 45..19 21	0.76	g21082 52	34	1608	1.1e- 154	(Y1022 8) P- glycoprotein -2 [Arabidopsis]

172964	ATU034 904	ATL8S1 5678:5 15..1	nap				ATL8S1 5678:2 37..45	0.75	g35598 11	34	690	2.0e- 68	thalia nal (AJ010 735) gr1- protei n [Arabi dopsis thalia nal]
172965	ATU034 905	ATL8C1 5617:1 ..443	nap				ATL8C1 5617:7 4..443	0.75	g31525 69	34	216	2.6e- 17	(AC002 986) Contai ns simila rity to YELA protei n gb U63 062 from Dictyo steliu m discoi deum. [Arabi dopsis thalia nal]
172966	ATU034 906	ATL8C2 0879:1 ..554	nap				ATL8C2 0879:3 0..485	0.75	g44067 84	34	808	6.1e- 82	(AC006 532) putati ve oligop eptide transp

172967	ATU034 907	ATL8C4 740:20 5..1	nap					ATL8C4 740:20 5..86	0.75	g28945 94	34	152	1.2e- 13	ort protei n [Arabi dopsis thalia na] (AL021 889) hypoth etical protei n [Arabi dopsis thalia na]
172968	ATU034 908	ATL8C2 0861:1 025..2 46	nap					ATL8C2 0861:8 05..24 6	0.75	g15184 58	34	65	0.0066	(U4599 8) mitoch ondria l solute carrie r [Oncho cerca volvul us]
172969	ATU034 909	ATL8S2 5097:5 66..1	nap					ATL8S2 5097:4 48..18	0.74	g11435 91	34	389	9.6e- 36	(Z4880 1) alkali ne phosph atase [Synec hococc us PCC794 2]

172970	ATU034 910	ATL8C1 5208:1 ..933	nap				ATL8C1 5208:2 72..82 3	0.74	g44163 01	34	1320	2.1e- 107	(AF105 716) gag protei n [Zea mays]
172971	ATU034 911	ATL8C4 4068:7 35..1	nap				ATL8C4 4068:7 23..48	0.74	g49143 26	34	200	8.0e- 19	(AC005 489) F14N23 .12 [Arabi dopsis thalia na]
172972	ATU034 912	ATL8S1 9284:4 17..1	nap				ATL8S1 9284:4 15..22	0.73	g13626 8	34	439	5.0e- 41	TRYPTO PHAN SYNTHA SE BETA CHAIN [Acine tobact er calcoa ceticu s]
172973	ATU034 913	ATL8C4 4921:9 64..19 69	nap				ATL8C4 4921:9 64..18 86	0.73	g33342 83	34	88	0.0002 3	POLY(A) POLYME RASE (PAP) (POLYN UCLEOT IDE ADENYL YLTRAN SFERAS E) [Candi

172974	ATU034 914	ATL8C4 0034:8 68..1	nap					ATL8C4 0034:4 11..21 7	0.73	g41153 76	34	529	3.8e- 29	da albica ns] (AC005 967) unknown n protei n [Arabi dopsis thalia na]
172975	ATU034 915	ATL8C1 7446:1 ..1126	nap					ATL8C1 7446:3 9..663	0.72	g42621 59	34	776	4.1e- 65	(AC005 275) hypoth etical protei n [Arabi dopsis thalia na]
172976	ATU034 916	ATL8C4 6819:1 291..1	nap					ATL8C4 6819:7 48..26 1	0.72	g32419 44	34	485	7.6e- 48	(AC004 625) DNA- (apuri nic or apyrim idinic site) lyase, ARP [Arabi dopsis thalia na]
172977	ATU034 917	ATL8C1 4568:8 52..1	nap					ATL8C1 4568:8 26..31	0.72	g45880 02	34	879	6.8e- 95	(AF085 279) hypoth

172978	ATU034 918	ATL8C3 4930:6 74..1	nap						ATL8C3 4930:4 58..61	0.71	g45080 69	34	269	9.3e- 29	(AC005 882) 12246 [Arabi dopsis thalia nal]	etical ankyri n-like protei n [Arabi dopsis thalia nal]
172979	ATU034 919	ATL8S3 543:54 7..1	nap						ATL8S3 543:46 0..37	0.71	g39138 11	34	750	2.4e- 70	GLUTAM YL- TRNA REDUCT ASE PRECUR SOR (GLUTR) [Oryza sativa]	GLUTAM YL- TRNA REDUCT ASE PRECUR SOR (GLUTR) [Oryza sativa]
172980	ATU034 920	ATL8C3 538:1. .1337	nap						ATL8C3 538:30 ..1060	0.71	g49143 61	34	1339	7.0e- 139	(AC007 289) putati ve revers e transc riptas e [Arabi dopsis thalia]	(AC007 289) putati ve revers e transc riptas e [Arabi dopsis thalia]

172981	ATU034 921	ATL8C3 6369:1 234..1	nap				ATL8C3 6369:1 035..1 51	0.70	g30333 90	34	630	8.1e- 41	na] (AC004 238) putati ve vacuol ar sortin g recept or [Arabi dopsis thalia na]
172982	ATU034 922	ATL8C3 9046:3 86..61 5	nap				ATL8C3 9046:4 21..60 4	0.69	g45389 45	34	318	8.2e- 14	(AL049 483) putati ve thiore doxin [Arabi dopsis thalia na]
172983	ATU034 923	ATL8C2 2049:1 299..8 2	nap				ATL8C2 2049:1 299..1 30	0.69	g36872 34	34	1364	5.2e- 135	(AC005 169) putati ve copia- like transp osable elemen t [Arabi dopsis thalia na]
172984	ATU034	ATL8C8	nap				ATL8C8	0.68	g42205	34	433	4.4e-	(AL035

924	783:12 42..24 8	nap				783:87 3..248	19	34	1076	35	356) putati ve protei n bindin g protei n [Arabi dopsis thalia na]
172985	ATU034 925	ATL8C4 2346:1 ..957	nap			ATL8C4 2346:4 2..763	944163 01	34	1076	6.7e- 81	(AF105 716) gag protei n [Zea mays]
172986	ATU034 926	ATL8S1 7998:4 41..1	nap			ATL8S1 7998:3 28..43	g19033 57	34	323	8.9e- 32	(AC000 104) Strong simila rity to Arabid opsis 2A6 (gb X8 3096) . [Arabi dopsis thalia na]
172987	ATU034 927	ATL8C4 0556:1 ..937	nap			ATL8C4 0556:4 6..896	g30804 21	34	824	9.3e- 84	(AL022 604) putati ve protei

172988	ATU034 928	ATL8C4 5657:1 ..1492	nap						ATL8C4 5657:2 89..13 05	0.67	g35137 46	34	513	3.0e- 42	n [Arabi dopsis thalia nal] (AF080 118) contai ns simila rity to AMP- bindin g enzyme s (Pfam: AMP- bindin g.hmm, score: 18.66, 25.90 and 43.55) ; most simila r to acyl- CoA synthe tases [Arabi dopsis thalia nal]
172989	ATU034 929	ATL8C4 0505:1 ..625	nap						ATL8C4 0505:2 4..606	0.66	g31525 60	34	634	5.5e- 67	(AC002 986) Strong

172991	ATU034 931	ATL8C4 6046:1 640..1 102	nap				ATL8C4 6046:1 370..1 102	0.65	g41063 89	34	114	1.6e- 08	(AF074 849) MEI1 [Arabi dopsis thalia na]
172992	ATU034 932	ATL8C2 402:10 79..1	nap				ATL8C2 402:79 9..322	0.65	g22136 08	34	1244	2.7e- 117	(AC000 103) F21J9. 2 [Arabi dopsis thalia na]
172993	ATU034 933	ATL8C4 7429:6 15..95	nap				ATL8C4 7429:5 50..95	0.65	g99758	34	546	8.9e- 56	monosa cchari d transp ort protei n STP4 - Arabid opsis thalia na [Arabi dopsis thalia na]
172994	ATU034 934	ATL8C4 4454:6	nap				ATL8C4 4454:3	0.65	g42636 50	34	388	1.9e- 39	(AC006 136)

172995	ATU034 935	57..1	nap				24..75	0.64	g11716 42	34	152	1.1e- 13	putative reverse transcriptase [Arabis dopsis thaliana]
		ATL8C2 86:1.. 497					ATL8C2 86:73.. .481						PROBAB LY SERINE /THREO NINE- PROTEI N KINASE NAK [Arabis dopsis thaliana]
172996	ATU034 936	ATL8C4 4412:1 304..6 27	nap				ATL8C4 4412:1 075..6 27	0.64	g42493 91	34	338	1.5e- 32	(AC005 966) ... Simila r to [Arabis dopsis thaliana]
172997	ATU034 937	ATL8S2 6819:1 9..640	nap				ATL8S2 6819:5 0..601	0.64	g19426 64	34	282		Sialid ase, Large 68kd Form, Comple xed With

172998	ATU034 938	ATL8C3 7676:9 40..1	nap					ATL8C3 7676:9 18..11	0.64	917067 72	34	447	7.6e- 42	FARNESYL-DIPHOSPHATE FARNESYLTRANSFERASE SQUALENE SYNTHETASE (SQS) (SS) (FPP:FPP) FARNESYLTRANSFERASE SFERASE [Arabis thaliana]
172999	ATU034 939	ATL8C2 4266:2 564..4 54	nap					ATL8C2 4266:2 279..7 28	0.63	937775 27	34	975	3.5e- 99	(AF053008) gag-pol polyprotein [Glycine max]
173000	ATU034 940	ATL8C1 4796:3 840..3 4	nap					ATL8C1 4796:1 213..3 4	0.63	943097 63	34	362	1.2e- 32	(AC006217) putative

173001	ATU034 941	ATL8C1 9538:1 012..3 36	nap					ATL8C1 9538:9 37..33 6	0.63	g11710 27	34	252	3.2e- 20	retrotransposon polyprotein [Arabis dopsis thaliana]
173002	ATU034 942	ATL8C2 6618:1 44..15 86	nap					ATL8C2 6618:1 44..15 34	0.62	g44544 70	34	131	3.5e- 06	(AC006234) putative sugar transporter [Arabis dopsis thaliana]
173003	ATU034 943	ATL8S2 8965:5 27..1	nap					ATL8S2 8965:4 57..66	0.62	g26657 05	34	122	7.5e- 11	(AF035413) AgaA [Agrobacterium tumefaciens]
173004	ATU034 944	ATL8S2 2983:1 ..631	nap					ATL8S2 2983:1 26..58	0.62	g38853 37	34	750	2.3e- 59	(AC005623) hypoph

173005	ATU034 945	ATL8S8 055:1. .532	nap					4	ATL8S8 055:12 4..483	0.62	g45876 80	34	590	6.1e- 60	etical protei n [Arabi dopsis thalia na]
173006	ATU034 946	ATL8C3 2323:1 ..1115	nap						ATL8C3 2323:9 8..109 8	0.62	g45859 79	34	659	1.7e- 67	(AC005 287) Simila r to ABC- transp orter atp- bindin g protei n [Arabi dopsis thalia na]
173007	ATU034 947	ATL8C9 271:1. .740	nap						ATL8C9 271:10 4..688	0.61	g44689 92	34	911		(AL035 605) putati ve protei n

173008	ATU034 948	ATL8S7 896:1. .534	nap					ATL8S7 896:52 ..534	0.61	g18576 30	34	465	3.0e- 42	[Arabi dopsis thalia na] (U8415 4) putati ve transp osase subuni t [Pseud omonas alcali genes] (AC004 473) Contai ns simila rity to hypoth etical 43.1 KD protei n in NDK- GCPE interg enic region gb 493 519 from E. coli sequen
173009	ATU034 949	ATL8C1 2443:7 31..1	nap					ATL8C1 2443:6 08..48	0.60	g32490 72	34	574	1.7e- 40	

173010	ATU034 950	ATL8S2 8594:4 89..1	nap				ATL8S2 8594:4 21..41	0.60	g47614 56	34	126	0.16	ce gb U02 965. [Arabi dopsis thalia nal (AF120 930) putati ve mitomy cin C transl ocase [Strep tomyce s lavend ulae]
173011	ATU034 951	ATL8C4 3949:2 443..1	nap				ATL8C4 3949:2 443..3 5	0.60	g43253 54	34	842		(AF128 395) contai ns simila rity to retrov irus- relate d polypr oteins and to CCHC zinc finger protei n (Pfam:

173012	ATU034 952	ATL8C1 7374:1 ..1302	nap				ATL8C1 7374:1 06..58 3	0.60	g49143 81	34	451	5.7e- 47	PF0009 8, Score= 16.3, E=0.05 1, E= 1) [Arabi dopsis thalia na]
173013	ATU034 953	ATL8C1 7876:1 410..1	nap				ATL8C1 7876:1 284..1 90	0.59	g44671 46	34	1383		(AL035 540) galact osidas e like protei n [Arabi dopsis thalia na]
173014	ATU034 954	ATL8C4 6118:4 78..1	nap				ATL8C4 6118:4 78..24	0.59	g22448 95	34	639	1.4e- 53	(Z9733 8) simila r to cytoch rome P450 [Arabi

173015	ATU034 955	ATL8S2 6371:4 62..37	nap				ATL8S2 6371:1 98..37	0.59	g21459 70	34	224		dopsis thalia nal quinol inate synthe tase nadA - Mycoba cteriu m leprae [Mycob acteri um leprae]
173016	ATU034 956	ATL8C4 382:34 38..1	nap				ATL8C4 382:34 38..92 6	0.59	g44328 07	34	804	2.3e- 131	(AC006 570) putati ve polypr otein [Arabi dopsis thalia nal]
173017	ATU034 957	ATL8C4 5495:6 76..1	nap				ATL8C4 5495:6 76..97	0.59	g45884 74	34	646	2.1e- 66	(AF108 123) phosph oinosi tide- specif ic phosph olipas e C [Brass ica napus]

173027	ATU034 967	ATL8C4 7618:1 172..1 76	nap				ATL8C4 7618:1 088..1 88	0.57	g36680 89	34	1314	1.2e- 108	(AC004 667) unknown protein [Arabi dopsis thalia na]
173028	ATU034 968	ATL8C2 26:1.. 2333	nap				ATL8C2 26:22. .2261	0.57	g43097 63	34	1264	1.3e- 109	(AC006 217) putative retrotransposon polyprotein [Arabi dopsis thalia na]
173029	ATU034 969	ATL8S8 658:54 4..1	nap				ATL8S8 658:52 1..308	0.57	g30333 86	34	381	4.9e- 19	(AC004 238) RING3-like protein [Arabi dopsis thalia na]
173030	ATU034 970	ATL8C2 7329:1 ..1326	nap				ATL8C2 7329:1 74..73 0	0.57	g28276 37	34	982		(AL021 636) putative protein

173031	ATU034 971	ATL8C1 7039:1 ..1629	nap					ATL8C1 7039:7 8..162 9	0.57	g33193 60	34	1580	5.4e- 138	(AF077 408) contai ns simila rity to Vicia faba retrot ranspo son- like gene (GB:AB 007467) [Arabi dopsis thalia nal
173032	ATU034 972	ATL8C2 7691:1 058..1	nap					ATL8C2 7691:9 93..16 2	0.57	g22449 73	34	566	(Z9734 0) simila rity to extens in class 1 protei n [Arabi dopsis thalia nal	

173033	ATU034 973	ATL8S5 89:1.. 524	nap				ATL8S5 89:239 ..524	0.56	g45672 96	34	615	4.9e- 48	na] (AC006 918) putati ve Athila retroeo lement ORF1 protei n [Arabi dopsis thalia na]
173034	ATU034 974	ATL8S1 6838:5 09..1	nap				ATL8S1 6838:3 25..50	0.56	g35602 72	34	342	5.0e- 34	(AL031 535) transc riptio n initia tion factor tfiid 60 kd subu nit [Schiz osacch aromyc es pombe]
173035	ATU034 975	ATL8S2 8969:3 87..1	nap				ATL8S2 8969:3 36..20	0.55	g47707 2	34	97	0.9998	mucin 7 precu sor, saliva ry - human []

173036	ATU034 976	ATL8C4 4388:1 718..1	nap				ATL8C4 4388:1 718..9 59	0.55	g35137 45	34	1977	2.9e- 196	(AF080 118) contai ns simila rity to revers e trancr iptase (Pfam: rvt.hm m, score: 42.57) [Arabi dopsis thalia na]
173037	ATU034 977	ATL8C4 6709:2 97..1	nap				ATL8C4 6709:2 91..23	0.54	g21911 96	34	167	3.4e- 12	(AF007 271) contai ns a MADS domain [Arabi dopsis thalia na]
173038	ATU034 978	ATL8C4 4669:4 37..1	nap				ATL8C4 4669:3 15..37	0.53	g11749 62	34	527	1.1e- 50	VI POLYSA CCHARI DE BIOSYN THESIS PROTEI N VIPA/T VIB

173039	ATU034 979	ATL8C4 7021:7 39..95 8	nap				ATL8C4 7021:7 39..91 6	0.53	945586 82	34	170	1.8e- 14	[Salmonella typhi] (AC006 586) hypothetical protein [Arabidopsis thaliana]
173040	ATU034 980	ATL8C3 211:22 0..212 9	nap				ATL8C3 211:22 0..187 1	0.53	g33273 90, g46801 79	34, 34	487, 167	3.2e- 46, 2.1e- 13	(AC004 483) hypothetical protein [Arabidopsis thaliana]; (AF111 709) polyprotein [Oryza sativa subsp. indica]
173041	ATU034 981	ATL8C4 2053:9 31..1	nap				ATL8C4 2053:6 65..11 2	0.53	g44163 01	34	1330	2.7e- 107	(AF105 716) gag protein [Zea mays]
173042	ATU034	ATL8C7	nap				ATL8C7	0.52	g45905	34	234	0.83	(AF136)

173045	ATU034 985	ATL8C2 7869:1 194..1	nap				ATL8C2 7869:1 007..1 1	0.52	948502 96	34	696		ium americ anum]
173046	ATU034 986	ATL8C1 613:1. .923	nap				ATL8C1 613:52 ..901	0.51	944163 01	34	1334	7.4e- 96	(AL049 876) RPP1- Wsa- like diseas e resist ance protei n [Arabi dopsis thalia na]
173047	ATU034 987	ATL8S1 7884:5 16..1	nap				ATL8S1 7884:2 41..36	0.51	931222 03	34	259	2.8e- 09	(AF105 716) gag protei n [Zea mays] OXYGEN - INDEPE NDENT COPROP ORPHYR INOGEN III OXIDAS E (COPRO PORPHY RINOGE NASE) (COPRO

173048	ATU034 988	ATL8S3 0605:6 26..26	nap					ATL8S3 0605:3 67..26	0.51	g99755	34	762	8.3e- 74	GEN OXIDAS E) [Ralst onia eutrop ha]
173049	ATU034 989	ATL8C2 6543:7 50..24 6	nap					ATL8C2 6543:4 49..29 0	0.50	g62953 6	34	595	4.6e- 50	ammoni um transp ort protei n - Arabid opsis thalia na []
173050	ATU034	ATL8C1	nap					ATL8C1	0.49	g32362	34	858	2.4e-	(AC004

990	6661:1 325..2 482					6661:1 411..1 530	51	74	684) putati ve phosph oribos ylamin oimida zole carbox ylase [Arabi dopsis thalia na]
173051	ATU034 991	ATL8C4 6965:9 48..14 93	nap			ATL8C4 6965:9 48..10 97	0.49 g46462 05	124 8.0e- 08	(AC007 230) T23K8. 8 [Arabi dopsis thalia na]
173052	ATU034 992	ATL8C1 6457:1 ..1421	nap			ATL8C1 6457:7 6..841	0.48 g34137 01	568 2.5e- 62	(AC004 747) hypoth etical protei n [Arabi dopsis thalia na]
173053	ATU034 993	ATL8C2 184:10 48..1	nap			ATL8C2 184:62 9..213	0.48 g44903 39	80 0.0003 8	(AL035 656) putati ve protei n [Arabi dopsis

173054	ATU034 994	ATL8C3 585:27 2..799	nap				ATL8C3 585:35 4..587	0.48	g44067 59	34	75	5.5e- 05	thalia na] (AC006 836) hypoth etical protei n [Arabi dopsis thalia na]
173055	ATU034 995	ATL8C3 2959:5 18..19 85	nap				ATL8C3 2959:5 18..14 84	0.48	g46783 25	34	354	1.6e- 32	(AL049 658) putati ve protei n [Arabi dopsis thalia na]
173056	ATU034 996	ATL8C2 2056:4 30..1	nap				ATL8C2 2056:3 68..35	0.47	g31766 84	34	175	3.6e- 17	(AC003 671) Contai ns simila rity to equili bratia ve nucleo side transp orter 1 gb U81 375 from

173059	ATU034 999	ATL8S2 0688:5 72..1	nap					ATL8S2 0688:4 29..81	0.47	g16530 49	34	132	1.7e- 11	PttA2 prote n (GB:AF 037337) [Arabi dopsis thalia nal (D9091 0) hypoth etical protei n [Synec hocyst is sp.] (AC004 625) putati ve peroxi dase [Arabi dopsis thalia nal (AB015 976) sn- glycer ol-3- phosph ate dehydr ogenas e
173060	ATU035 000	ATL8C2 0712:2 233..2 53	nap					ATL8C2 0712:1 981..1 355	0.47	g32419 46	34	442	1.6e- 41	
173061	ATU035 001	ATL8S2 3780:5 24..1	nap					ATL8S2 3780:4 11..43	0.46	g32998 06	34	703	6.7e- 56	

173062	ATU035 002	ATL8C1 2974:1 170..1 663	nap					ATL8C1 2974:1 185..1 515	0.45	g39285 43	34	141	8.0e- 12	[Pseudomonas tolaasii] (AB016 819) UDP- glucose glucose yltran sferase [Arabidopsis thaliana]
173063	ATU035 003	ATL8C1 5917:1 ..659	nap					ATL8C1 5917:3 82..64 6	0.44	g40384 81	34	177	8.1e- 21	(AL021 713) DNA binding g-like protein [Arabidopsis thaliana]
173064	ATU035 004	ATL8C1 8073:1 ..1384	nap					ATL8C1 8073:2 33..13 55	0.44	g33193 60	34	1192	6.4e- 107	(AF077 408) contains similarity to Vicia fabaretro- ransposon-

173065	ATU035 005	ATL8S8 739:12 5..574	nap				ATL8S8 739:12 5..239	0.44	g45444 33	34	132	3.9e- 06	(AC006 955) hypoth etical protei n [Arabi dopsis thalia na]
173066	ATU035 006	ATL8C4 88:1.. 660	nap				ATL8C4 88:71.. .613	0.43	g22448 63	34	213	3.4e- 18	(Z9733 7) hypoth etical protei n [Arabi dopsis thalia na]
173067	ATU035 007	ATL8S2 2454:4 65..1	nap				ATL8S2 2454:3 78..34	0.43	g38610 75	34	394	3.8e- 38	(AJ235 272) TRANSC RIPTIO N TERMIN ATION FACTOR RHO (rho) [Ricke

173068	ATU035 008	ATL8C1 3115:8 59..1	nap					ATL8C1 3115:8 30..16 8	0.43	g42042 84	34	570	2.1e- 61	ttsia prowaz ekii] (AC003 027) icl pr t_seq No defini tion line found [Arabi dopsis thalia na]
173069	ATU035 009	ATL8C4 6694:2 623..2 198	nap					ATL8C4 6694:2 387..2 198	0.42	g45220 07	34	451	1.1e- 43	(AC007 069) unknow n protei n [Arabi dopsis thalia na]
173070	ATU035 010	ATL8C3 9987:7 65..71	nap					ATL8C3 9987:5 97..17 3	0.42	g45394 30	34	143	2.1e- 11	(AL049 171) putati ve protei n [Arabi dopsis thalia na]
173071	ATU035 011	ATL8S8 70:1.. 726	nap					ATL8S8 70:25.. .622	0.42	g33778 34	34	621	7.0e- 59	(AF075 598) No defini

173072	ATU035 012	ATL8C2 614:1. .1407	nap					ATL8C2 614:11 22..13 75	0.41	g42638 22	34	434	5.2e- 34	tion line found [Arabi dopsis thalia nal] (AC006 067) putati ve recept or protei n kinase [Arabi dopsis thalia nal]
173073	ATU035 013	ATL8S3 0566:1 ..510	nap					ATL8S3 0566:4 75..9	0.41	g24999 41	34	455	2.0e- 44	AMIDOP HOSPHO RIBOSY LTRANS FERASE PRECUR SOR (GLUTA MINE PHOSPH ORIBOS YLPYRO PHOSPH ATE AMIDOT RANSFE RASE) (ATASE) (GPATA

173074	ATU035 014	ATL8C3 8170:7 31..1	nap						ATL8C3 8170:1 37..11	0.41	g33273 95	34	142	1.3e- 10	SE) [Rhizo bium etli] (AC004 483) hypoth etical protei n [Arabi dopsis thalia nal]
173075	ATU035 015	ATL8C4 6725:2 183..1	nap						ATL8C4 6725:2 141..1 00	0.41	g46801 80	34	665	9.6e- 58	(AF111 709) polypr oteins [Oryza sativa subsp. indica]
173076	ATU035 016	ATL8S2 1494:5 82..1	nap						ATL8S2 1494:3 76..61	0.41	g22909 92	34	303	4.7e- 27	(AF006 000) unknown [Borde tella pertus sis]
173077	ATU035 017	ATL8C4 3979:1 035..1	nap						ATL8C4 3979:1 015..1 3	0.40	g43097 67	34	1489		(AC006 217) putati ve Athila retroeo lement ORF1 protei

173078	ATU035 018	ATL8S2 0948:5 49..1	nap									g13818 05	34	94	2.3e- 07	n [Arabi dopsis thalia na] (U6001 1) unknow n [Agrob acteri um tumefa ciens] (Z7125 8) simila r to Flavin - bindin g monoox ygenas e-like [Caeno rhabdi tis elegan s]
173079	ATU035 019	ATL8C1 8523:1 604..2 307	nap									g38739 13	34	152	1.2e- 05	(Z7125 8) simila r to Flavin - bindin g monoox ygenas e-like [Caeno rhabdi tis elegan s]
173080	ATU035 020	ATL8S2 878:1. .511	nap									g99749	34	460	4.3e- 47	probab le serine /threo nine- specif ic protei n kinase

173081	ATU035 021	ATL8S2 7231:1 ..468	nap										g39370 7	34	378	7.4e- 36	(X6769 6) acetyl -CoA acyltr ansfer ase [Cucum is sativu s]	ATPK64 (EC 2.7.1. -) - Arabid opsis thalia na [Arabi dopsis thalia na]
173082	ATU035 022	ATL8C2 9507:3 58..1	nap										g21911 48	34	198	9.6e- 13	(AF007 269) A IG00 2N01.2 8 gene produc t [Arabi dopsis thalia na]	
173083	ATU035 023	ATL8C2 1347:1 078..4 44	nap										g42493 84	34	79	0.31	(AC005 966) Simila r to [Arabi dopsis na]	

173091	030	275:14 84..18 60	nap							70						42	660) protei n kinase -like protei n [Arabi dopsis thalia na]
	ATU035 031	ATL8C2 8267:9 18..18 4	nap							g36500 36	34	539				6.3e- 50	(AC005 396) putati ve transp osase [Arabi dopsis thalia na]
173092	ATU035 032	ATL8S1 0784:3 30..1	nap							g38505 68	34	97				2.3e- 07	(AC005 278) Simila r to hypoth etical protei n SPAC2F 7.14c [Arabi dopsis thalia na]
173093	ATU035 033	ATL8C3 1572:1 ..192	nap							g42042 62	34	321				2.0e- 28	(AC005 223) 37783 [Arabi dopsis thalia na]

173094	ATU035 034	ATL8C3 815:1. .740	nap									g41153 81	34	305	2.3e- 19	thalia na] (AC005 967) putati ve limone ne cyclas e [Arabi dopsis thalia na]
173095	ATU035 035	ATL8S4 66:1.. 583	nap									g36953 82	34	666	3.7e- 61	(AF096 370) contai ns simila rity to Arabid opsis thalia na retrot ranspo son Tall-1 (GB:L4 7193) [Arabi dopsis thalia na]
173096	ATU035 036	ATL8C1 245:14 39..1	nap									g40637 60	34	1543	9.4e- 123	(AC005 561) putati ve POL3

173101	040	8705:8 62..31 3	nap					8705:6 87..31 3	51				35	398) dimeth ylanil ine monoox ygenas e-like protei n [Arabi dopsis thalia na]
	ATU035 041	ATL8S1 3870:5 1..552							g40005 7	34	512	1.3e- 49		INOSIN E-5'- MONOPH OSPHAT E DEHYDR OGENAS E (IMP DEHYDR OGENAS E) (IMPDH) (IMPD) [Acine tobact er calcoa ceticu s]
173102	ATU035 042	ATL8S7 367:47 8..1	nap						g45443 97	34	700	1.6e- 70		(AC007 047) hypoth etical protei n [Arabi

173103	ATU035 043	ATL8C6 0:3692 ..2433	nap									g38105 96	34	1010	9.5e- 93	dopsis thalia na]
173104	ATU035 044	ATL8C1 0347:8 41...1	nap									g34452 09	34	327		(AC004 786) putati ve serine carbox ypepti dase I [Arabi dopsis thalia na]
173105	ATU035 045	ATL8S2 8270:1 ..468	nap									g34200 58	34	376	1.4e- 32	(AC004 680) unknow n protei n [Arabi dopsis thalia na]
173106	ATU035 046	ATL8S2 1900:1	nap									g17235 58	34	235	1.1e- 18	HYPOTH ETICAL

Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	

173113	ATU035 053	ATL8C1 563:10 51..76 2	nap							g38505 68	34	269	1.1e- 27	(AC005 (278) Simila r to hypothe tical protei n SPAC2F 7.14c [Arabi dopsis thalia na]	[Nicot iana tabacu m]
173114	ATU035 054	ATL8C2 1477:6 88..1	nap							g22752 09	34	237	8.0e- 11	(AC002 337) FCA gamma isolog [Arabi dopsis thalia na]	
173115	ATU035 055	ATL8C3 161:11 55..22 8	nap							g42635 43	34	1325	1.1e- 137	(AC006 250) putati ve Athila retro ement ORF1 protei n [Arabi dopsis thalia	

[illegible]

173124	ATU035 064	ATL8S8 581:50 1..156	nap									g34019 52	34	244	2.9e- 22	(AB011 413) Orf8 [Strep tomyce s griseu s]	e-rich protei n APG [Arabi dopsis thalia na]
173125	ATU035 065	ATL8C1 9555:2 783..3 528	nap									g44553 19	34	698	1.2e- 68	(AL035 528) putati ve diseas e resist ance protei n [Arabi dopsis thalia na]	
173126	ATU035 066	ATL8S1 8927:4 90..1	nap									g24996 15	34	443	4.7e- 47	MITOGE N- ACTIVA TED PROTEI N KINASE HOMOLO G NTF4 (P45) [Nicot	

173137	ATU035 077	ATL8C4 6351:1 ..1701	nap											g39351 38	34	321	5.6e- 36	(AC005 106) T25N20 .2 [Arabi dopsis thalia nal]	e resist ance protei n [Arabi dopsis thalia nal]
173138	ATU035 078	ATL8S1 8948:4 83..1	nap											g16541 44	34	75	2.3e- 09	(U3847 1) small GTP- bindin g protei n rab [Brass ica rapa]	(U3847 1) small GTP- bindin g protei n rab [Brass ica rapa]
173139	ATU035 079	ATL8C2 1633:3 30..1	nap											g24292 90	34	152	6.3e- 12	(AF014 469) peroxi dase [Oryza sativa]	(AF014 469) peroxi dase [Oryza sativa]
173140	ATU035 080	ATL8C4 0338:1 ..1303	nap											g42494 05	34	38	0.92	(AC006 072) unknow n protei	(AC006 072) unknow n protei

173141	ATU035 081	ATL8C3 3009:1 430..1 080	nap									g18711 89	34	445	1.2e- 42	(U9043 9) Ser/Th r kinase isolog [Arabi dopsis thalia na]
173142	ATU035 082	ATL8S3 415:42 ..578	nap									g25296 72	34	601	5.2e- 62	(AC002 535) putati ve pectin esterase [Arabi dopsis thalia na]
173143	ATU035 083	ATL8C2 8801:1 ..678	nap									g45672 35	34	189	3.6e- 15	(AC007 119) putati ve phosph atidyl inositol/pho phatidylchol ine transfe r protei

173151	ATU035 091	ATL8S1 1417:1 . .331	nap							g45844 93	34	184	5.2e- 16	(AL049 587) putati ve trans riptio nal regula tor [Strep tomyces coelicolor] (AF075 598)
173152	ATU035 092	ATL8C2 4682:7 63..14 95	nap							g33778 34	34	865	1.2e- 71	No defini tion line found [Arabi

173153	ATU035 093	ATL8S1 3929:1 ..292	nap										g44544 58	34	160	3.2e- 10	(AC006 234) unknown protein [Arabi dopsis thalia na]
173154	ATU035 094	ATL8C4 6068:1 ..623	nap										g32528 06	34	161	0.0006 6	(AC004 705) hypoth etical protein [Arabi dopsis thalia na]
173155	ATU035 095	ATL8S2 5498:2 00..1	nap										g45844 97	34	65	0.040	(AL049 587) putati ve IPP isomer ase [Strep tomyce s coelic olor]
173156	ATU035 096	ATL8C4 1792:1 231..3 63	nap										g33778 49	34	560	5.4e- 40	(AF076 274) simila r to recept or

173157	ATU035097	ATL8C13538:2010..757	nap										g4309767	34	1369	3.5e-189	(AC006217) putative Athila retroelement ORF1 protein [Arabi dopsis thalia na]
173158	ATU035098	ATL8S13499:560..1	nap										g4689474	34	273	4.8e-20	(AC007213) unknown protein [Arabi dopsis thalia na]
173159	ATU035099	ATL8C32373:349..1	nap										g4388823	34	399	3.7e-23	(AC006528) hypothetical protein [Arabi dopsis thalia na]

[illegible]

173160	ATU035 100	ATL8C4 0851:9 3..1	nap								g41063 89	34	130	0.0002 6	(AF074 849) MEI1 [Arabi dopsis thalia na]
173161	ATU035 101	ATL8C9 01:654 5..868 1	nap								g44173 05	34	431	5.4e- 25	(AC006 446) hypoth etical protei n [Arabi dopsis thalia na]
173162	ATU035 102	ATL8C4 309:57 9..1	nap								g28326 57	34	105	1.2e- 07	(AL021 710) putati ve protei n [Arabi dopsis thalia na]
173163	ATU035 103	ATL8S1 554:50 0..1	nap								g43357 39	34	65	0.096	(AC006 248) hypoth etical protei n [Arabi dopsis thalia na]
173164	ATU035	ATL8C3	nap								g32490	34	62	0.031	(AC004

	104	1245:1 550..1								67							473) T13D8. 7 [Arabi dopsis thalia na]
173165	ATU035 105	ATL8S1 7175:1 06..53 0	nap							g22136 32	34	568	4.6e- 56	(AC000 103) F21J9. 24 [Arabi dopsis thalia na]			
173166	ATU035 106	ATL8C4 9483:8 50..16 93	nap							g13614 0	34	223	9.5e- 22	PUTATI VE AC9 TRANSP OSASE []			
173167	ATU035 107	ATL8C4 5453:1 745..3 25	nap							g33193 60	34	1597	3.8e- 140	(AF077 408) contai ns simila rity to Vicia faba retrot ranspo son- like gene (GB:AB 007467) [Arabi dopsis thalia			

173171	ATU035 111	ATL8C1 286:22 20..37 45	nap							g47261 13	34	101	0.0002 9	na] (AC006 436) putati ve DNA topois omeras e [Arabi dopsis thalia na]
173172	ATU035 112	ATL8C3 4948:1 ..574	nap							g32985 51	34	331	1.2e- 16	(AC004 681) putati ve salt- induci ble protei n [Arabi dopsis thalia na]
173173	ATU035 113	ATL8C4 322:1. .788	nap							g49268 70	34	720	3.7e- 75	(AC007 509) putati ve revers e transc riptas e [Arabi dopsis thalia na]
173174	ATU035 114	ATL8S1 7154:5	nap							g31828 89	34	496	8.0e- 36	GENERA L L-

		95..20 1																	AMINO ACID TRANSP ORT PERMEA SE PROTEI N AAPM [Rhizo bium legumi nosaru m]
173175	ATU035 115	ATL8C3 8717:2 337..3 136	nap												g45388 96	34	467	1.4e- 30	(AL049 482) putati ve protei n [Arabi dopsis thalia na]
173176	ATU035 116	ATL8C2 79:140 7..236	nap												g42635 24	34	110	0.019	(AC004 044) hypoth etical protei n [Arabi dopsis thalia na]
173177	ATU035 117	ATL8C4 3329:5 67..1	nap												g45672 96	34	842		(AC006 918) putati ve Athila retro element

173178	ATU035 118	ATL8S1 0522:1 ..356	nap										g28326 44	34	189	6.5e- 17	(AL021 710) teosin te branch edl - like protei n [Arabi dopsis thalia na]
173179	ATU035 119	ATL8S4 21:1.. 412	nap										g44568 51	34	141	1.1e- 08	(AJ236 791) RNA polyme rase beta subuni t [Strep tococc us pneumo niae]
173180	ATU035 120	ATL8C4 0582:5 11..1	nap										g30804 50	34	242	1.2e- 26	(AL022 605) hypoth etical protei n [Arabi

173181	ATU035 121	ATL8C5 353:37 25...32 51	nap							g17067 14	34	229	1.3e- 17	dopsis thalia na]
173182	ATU035 122	ATL8C3 7942:7 78..1	nap							g42204 45	34	151	1.5e- 15	(AC006 216) Simila r to [Arabi dopsis thalia na]
173183	ATU035 123	ATL8C4 3664:5	nap							g45394 60	34	198		(AL049 500)

173184	ATU035 124	41..1	nap							ATL8S3 0580:4 22..5	1.00	g31222 48	33	286	2.6e- 28	putati ve protei n [Arabi dopsis thalia na]
																D- HYDANT OINASE (DIHYD ROPYRI MIDINA SE) (DHPAS E) [Agrob acteri um radiob acter]
173185	ATU035 125	ATL8C2 7634:1 ..1100	nap									g40380 56	34	1205		(AC005 897) putati ve transp oson [Arabi dopsis thalia na]
173186	ATU035 126	ATL8C3 6923:7 32..1	nap									g46783 86	34	335	1.1e- 06	(AL049 656) putati ve protei n [Arabi dopsis

173191	ATU035 131	ATL8C1 4106:1 425..1	nap									g48743 00	34	529	3.8e- 37	(AC006 053) hypoth etical protein [Arabi dopsis thalia na]	integrase domain with DDE signature [Arabi dopsis thalia na]
173192	ATU035 132	ATL8C4 9811:8 0..130 7	nap									g35137 46	34	955	1.1e- 89	(AF080 118) contains similarity to AMP-binding enzyme s (Pfam: AMP-binding g.hmm, score: 18.66, 25.90	

173195	ATU035 135	ATL8C3 3936:2 586..1 753	nap										g43888 21	34	163		us fulgid us]
173196	ATU035 136	ATL8C4 0992:7 24..1	nap										g22526 30	34	325	2.5e- 26	(AC006 528) putati ve mudrA transp osase protei n [Arabi dopsis thalia na]
173197	ATU035 137	ATL8C3 4807:1 849..1	nap										g22450 65	34	194	2.2e- 06	(Z9734 2) hypoth etical protei n [Arabi dopsis thalia na]
173198	ATU035 138	ATL8S2 1391:2 0..530	nap										g42066 27	34	63	2.6e- 05	(AF067 954) putati ve

173199	ATU035 139	ATL8S1 4382:4 14..1	nap										g43213 99	34	89	0.0001 0	(AF047 039) omega- 3 fatty acid desaturase [Perilla frutescens]	outer membrane protein Salmonella typhimurium]
173200	ATU035 140	ATL8S3 0279:5 85..1	nap										g22448 36	34	659	2.9e- 67	(Z9733 7) RNA helica se homolog [Arabidopsis thaliana]	
173201	ATU035 141	ATL8S1 738:1. .620	nap										0.99	33	487	1.3e- 49	(AC006 569) putative tyrosine decarboxylase	

173202	ATU035 142	ATL8C3 6976:2 90...16 11	nap					ATL8C3 6976:2 92...15 90	0.99	g48877 55	33	455	2.5e- 41	[Arabi dopsis thalia na] (AC006 533) putati ve acetol actate syntha se [Arabi dopsis thalia na]
173203	ATU035 143	ATL8C1 7757:1 103...4 72	nap					ATL8C1 7757:1 070...4 72	0.99	g40080 06	33	983	1.3e- 102	(AF084 034) recept or- like protei n kinase [Arabi dopsis thalia na]
173204	ATU035 144	ATL8S1 5358:4 95...1	nap					ATL8S1 5358:3 68...39	0.99	g31832 45	33	306	4.0e- 28	PUTATI VE GLUTAM INE SYNTHE TASE (GLUTA MATE-- AMMONI A LIGASE)

173205	ATU035 145	ATL8C2 2061:9 89..28 7	nap					ATL8C2 2061:9 87..29 1	0.99		g45861 02	33	131	5.5e- 11	[Esche richia coli] (AL049 638) putati ve protei n [Arabi dopsis thalia na]
173206	ATU035 146	ATL8S9 106:1. .482	nap					ATL8S9 106:17 1..319	0.99		g33778 48	33	281	3.3e- 24	(AF076 274) contai ns simila rity to revers e transc riptas es (Pfam: rvt.hm m, score: 12.22) [Arabi dopsis thalia na]
173207	ATU035 147	ATL8S1 8357:3 23..1	nap					ATL8S1 8357:2 75..41	0.99		g54007 7	33	186	7.6e- 09	(U1376 7) HlyA [Anaba ena sp.]

173208	ATU035 148	ATL8S1 4236:5 93..1	nap			ATL8S1 4236:3 47..25 5	0.99	924934 93	33	133	2.1e- 07	SERINE CARBOX YPEPTI DASE II-1 PRECUR SOR (CP- MII.1) [Horde um vulgar e=barl ey, cv. Alexis , aleuro ne, Peptid e, 324 aa]
173209	ATU035 149	ATL8S4 735:54 2..1	nap			ATL8S4 735:51 4..62	0.98	g12073 8	33	688	6.2e- 64	GLUCOS E-6- PHOSPH ATE ISOMER ASE (GPI) (PHOSP HOGLUC OSE ISOMER ASE) (PGI) (PHOSP HOHEXO SE ISOMER ASE)

173210	ATU035 150	ATL8C2 2979:1 ..1618	nap					ATL8C2 2979:5 77..14 62	0.98	g44067 98	33	1145	7.8e- 106	(PHI) [Esche richia coli]
173211	ATU035 151	ATL8S2 3850:6 58..1	nap					ATL8S2 3850:5 27..36 5	0.98	g53498 2	33	627	1.0e- 57	(AC006 304) putati ve helica se [Arabi dopsis thalia na]
173212	ATU035 152	ATL8C3 5433:9 97..27 8	nap					ATL8C3 5433:9 97..47 0	0.97	g30213 57	33	380	1.6e- 34	(AJ005 082) UDP- galact ose 4- epimer ase [Cyamo psis tetrag onolob a]
173213	ATU035 153	ATL8S2 3905:1 ..433	nap					ATL8S2 3905:6 1..433	0.96	g37860 11	33	353	1.4e- 32	(AC005 499) putati ve elonga

173214	ATU035 154	ATL8C1 1860:1 446..7 72	nap					ATL8C1 1860:1 406..7 75	0.96	g48072 5	33	641	1.0e- 67	tion factor [Arabi dopsis thalia na]
173215	ATU035 155	ATL8S1 9429:1 7..576	nap					ATL8S1 9429:1 7..550	0.96	g32576 27	33	130	3.5e- 08	(AP000 005) 453aa long hypoth etical phosph o- sugar mutase [Pyroc occus horiko shii]
173216	ATU035 156	ATL8C4 7801:5 16..73 2	nap					ATL8C4 7801:5 20..73 2	0.96	g29147 06	33	194	4.6e- 14	(AC003 974) putati ve homeob

173217	ATU035 157	ATL8C7 161:1. .2128	nap							ATL8C7 161:12 9..183 0	0.96		g31767 14	33	328	4.8e- 32	ox protei n [Arabi dopsis thalia na]
173218	ATU035 158	ATL8S2 7483:6 42..1	nap							ATL8S2 7483:5 35..86	0.95		g36881 86	33	284	2.1e- 26	(AC002 392) putati ve tRNA- splici ng endonu lease positi ve effect or [Arabi dopsis thalia na]
173219	ATU035 159	ATL8C2 5145:1 280..1	nap							ATL8C2 5145:1 052..5 34	0.95		g22528 36	33	874	1.3e- 90	(AL031 804) putati ve protei n [Arabi dopsis thalia na]
																	(AF013 293) contai ns weak simila

173220	ATU035 160	ATL8S1 3740:1 ..448	nap					ATL8S1 3740:1 01..24 6	0.95	g29503 60	33	121	3.3e- 12	(AL021 767) possib le ubiqui nol- cytoch rome C reduct ase compon ent [Schiz osacch aromyc es pombel]	ality to S. cerevi siae BOB1 protei n (PIR:S 45444) [Arabi dopsis thalia na]
173221	ATU035 161	ATL8S2 9420:6 67..1	nap					ATL8S2 9420:5 92..9	0.95	g29824 64	33	268	6.0e- 27	(AL022 223) putati ve protei n [Arabi dopsis thalia na]	

173222	ATU035 162	ATL8C4 5192:1 709..1	nap				ATL8C4 5192:1 579..7 36	0.95	g44328 66	33	1859	2.1e- 169	(AC006 300) putati ve revers e transc riptas e [Arabi dopsis thalia na]
173223	ATU035 163	ATL8C1 4109:2 71..17 65	nap				ATL8C1 4109:2 71..93 4	0.94	g30333 97	33	648	7.0e- 37	(AC004 238) unknow n protei n [Arabi dopsis thalia na]
173224	ATU035 164	ATL8C1 4862:1 ..1123	nap				ATL8C1 4862:1 97..11 23	0.94	g21905 44	33	500	2.2e- 27	(AC001 229) Simila r to Saccha romyce s hypoth etical protei n P9642. 2 (gb U4 0828). [Arabi dopsis

173225	ATU035 165	ATL8C3 5973:1 315..9 92	nap				ATL8C3 5973:1 061..9 92	0.94	g29147 02	33	471	2.4e- 15	thalia na] (AC003 974) unknow n protei n [Arabi dopsis thalia na]
173226	ATU035 166	ATL8C2 9216:8 20..1	nap				ATL8C2 9216:7 66..23	0.93	g30045 55	33	306	7.4e- 30	(AC003 673) simila r to salt induci ble protei n [Arabi dopsis thalia na]
173227	ATU035 167	ATL8C2 6055:1 070..1	nap				ATL8C2 6055:6 48..58 6	0.93	g38105 96	33	157	4.8e- 13	(AC005 398) revers e- transc riptas e-like protei n [Arabi dopsis thalia na]
173228	ATU035 168	ATL8C3 7616:8	nap				ATL8C3 7616:8	0.93	g45845 39	33	845	2.3e- 89	(AL049 608)

173229	ATU035 169	54..1 ATL8C1 4154:1 132..1	nap				54..13 4	0.93	g44553 53	33	454	1.le- 35	extens in- like protei n [Arabi dopsis thalia na]
173230	ATU035 170	ATL8S7 162:1. .410	nap				ATL8S7 162:46 ..383	0.93	g12150 6	33	361	6.le- 27	SERINE HYDROX Y METHY LTRANS FERASE (SERIN E METHYL ASE) (SHMT) [Salmo nella typhim urium]
173231	ATU035 171	ATL8C2 046:23 38..18	nap				ATL8C2 046:22 83..15 40	0.93	g40380 57	33	440	7.3e- 38	(AC005 897) hypoth etical protei n [Arabi

173232	ATU035 172	ATL8C2 6209:7 64..22 6	nap					ATL8C2 6209:6 73..22 6	0.93	g35512 47	33	508	4.1e- 52	(AB012 703) 181 [Daucu s carota]
173233	ATU035 173	ATL8C5 565:37 2..1	nap					ATL8C5 565:37 2..193	0.93	g44067 85	33	156	2.0e- 06	(AC006 532) hypoth etical protei n [Arabi dopsis thalia na]
173234	ATU035 174	ATL8C2 5246:1 ..341	nap					ATL8C2 5246:1 33..34 1	0.93	g30045 63	33	350	2.7e- 34	(AC003 673) simila r to APG (non prolin e-rich region) [Arabi dopsis thalia na]
173235	ATU035 175	ATL8C2 2801:1 814..1 399	nap					ATL8C2 2801:1 770..1 399	0.92	g33866 10	33	633	6.1e- 50	(AC004 665) hypoth etical protei n

173236	ATU035 176	ATL8S2 9505:5 40..1	nap					ATL8S2 9505:4 45..7	0.92	g12438 2	33	208	2.8e- 19	[Arabi dopsis thalia na]
173237	ATU035 177	ATL8C2 6436:9 69..16	nap					ATL8C2 6436:4 45..16	0.92	g38105 96	33	629	1.2e- 32	ACETOL ACTATE SYNTHA SE ISOZYM E II LARGE SUBUNI T (AHAS- II) (ACETO HYDROX Y-ACID SYNTHA SE II LARGE SUBUNI T) (ALS- II) [Esche richia coli]
														(AC005 398) revers e- transc riptas e-like protei n [Arabi dopsis thalia

173238	ATU035 178	ATL8C2 341:95 9..1	nap				ATL8C2 341:95 9..22	0.92	g17070 12	33	590	2.4e- 60	na] (U7872 1) tyrosy l-tRNA synthe tase isolog [Arabi dopsis thalia na]
173239	ATU035 179	ATL8C1 7036:1 ..354	nap				ATL8C1 7036:9 0..345	0.92	g22451 18	33	404	8.3e- 32	(Z9734 3) hypoth etical protei n [Arabi dopsis thalia na]
173240	ATU035 180	ATL8C2 0928:1 ..1429	nap				ATL8C2 0928:2 03..13 19	0.91	g44553 35	33	1222	2.5e- 119	(AL035 525) putati ve protei n [Arabi dopsis thalia na]
173241	ATU035 181	ATL8C1 2672:1 ..752	nap				ATL8C1 2672:2 87..75 2	0.91	g32928 27	33	317	4.5e- 26	(AL031 018) putati ve protei n [Arabi dopsis thalia na]

173242	ATU035 182	ATL8C3 9382:6 49..23 6	nap				ATL8C3 9382:6 49..24 1	0.91	g21911 55	33	207	5.2e- 18	thalia na] (AF007 269) contai ns weak simila rity with bacter ial SECA protei ns. [Arabi dopsis thalia na]
173243	ATU035 183	ATL8C2 7974:7 06..1	nap				ATL8C2 7974:2 62..23	0.91	g30470 68	33	81		(AF058 825) simila r to maize transp oson MuDR (GB:M7 6978) [Arabi dopsis thalia na]
173244	ATU035 184	ATL8C1 894:13 12..15 3	nap				ATL8C1 894:51 2..153	0.90	g10870 73	33	559	2.5e- 52	(S7924 3) calmod ulin- bindin g heat-

173245	ATU035 185	ATL8C3 2960:2 814..2 118	nap					ATL8C3 2960:2 699..2 118	0.90	g32020 38	33	482	6.8e- 34	shock protein, CaMBP [Nicotiana tabacum]
173246	ATU035 186	ATL8C3 140:12 75..69 3	nap					ATL8C3 140:99 2..693	0.89	g17309 29	33	56	0.045	HYPOTHETICAL 42.0 KD PROTEIN IN DAPB-PAPS INTERGENIC REGION [Bacillus subtilis]
173247	ATU035 187	ATL8C2 2975:3 30..13 91	nap					ATL8C2 2975:5 00..12 57	0.89	g34618 41	33	626	7.5e- 63	(AC005315) putative receptor protein

173248	ATU035 188	ATL8C4 6768:3 12..14 97	nap						ATL8C4 6768:3 12..14 85	0.89	g98710 3	33	58	0.0012	n kinase [Arabi dopsis thalia na] (X8678 0) methyl transf erase [Strep tomyce s hygros copicu s]
173249	ATU035 189	ATL8C3 7859:2 34..71 7	nap						ATL8C3 7859:3 62..56 3	0.88	g22528 51	33	188	1.6e- 05	(AF013 294) No defini tion line found [Arabi dopsis thalia na]
173250	ATU035 190	ATL8S2 7278:4 48..1	nap						ATL8S2 7278:3 82..32	0.88	g25069 53	33	485	7.3e- 47	NADH DEHYDR OGENAS E I CHAIN F (NADH- UBIQUI NONE OXIDOR EDUCTA SE

173251	ATU035 191	ATL8C3 4559:7 02..22 57	nap						ATL8C3 4559:7 08..18 12	0.88	g26529 38	33	480	2.9e- 42	CHAIN 6) (NUO6) [Esche richia coli]
173252	ATU035 192	ATL8C3 0166:1 ..1357	nap						ATL8C3 0166:2 29..92 8	0.87	g45859 85	33	820	1.9e- 65	(Z4755 4) orf [Zea mays]
173253	ATU035 193	ATL8C3 1065:1 451..1	nap						ATL8C3 1065:1 451..1 80	0.87	g36953 87	33	743	2.6e- 64	(AC005 287) Hypoth etical protei n [Arabi dopsis thalia na]
173254	ATU035 194	ATL8S2 930:1. .542	nap						ATL8S2 930:13 9..531	0.87	g46893 56	33	99	1.5e- 08	(AF096 371) contai ns simila rity to repl ic ation protei n Al [Arabi dopsis thalia na]
															(AF132 566) BCDNA. LD2438 0

173255	ATU035 195	ATL8S3 0499:1 ..471	nap						ATL8S3 0499:1 70..41 5	0.87	g32978 16	33	412	9.3e- 41	[Droso phila melano gaster] (AL031 032) putati ve protei n [Arabi dopsis thalia na]
173256	ATU035 196	ATL8C3 9475:6 50..18 4	nap						ATL8C3 9475:5 13..20 9	0.87	g33778 19	33	428	3.3e- 42	(AF076 275) No defini tion line found [Arabi dopsis thalia na]
173257	ATU035 197	ATL8S9 56:1.. 525	nap						ATL8S9 56:7.. 525	0.87	g43097 03	33	254	6.6e- 23	(AC006 266) putati ve transp oson protei n [Arabi dopsis thalia na]
173258	ATU035 198	ATL8C5 305:27	nap						ATL8C5 305:26	0.86	g46462 01	33	1356	4.2e- 107	(AC007 230)

173259	ATU035 199	09..11 61	nap				85..11 61	0.86	g32490 83	430	4.4e- 43	Contai ns simila rity to F13P17 .8. [1]
		ATL8C2 2031:5 51..64					ATL8C2 2031:4 66..64			33		(AC004 473) Contai ns simila rity to heat shock transc riptio n factor homolo g gb 224 4754 from A. thalia na chromo some 4 contig gb 297 335. [Arabi dopsis thalia na]
173260	ATU035 200	ATL8C4 823:1. .2768	nap				ATL8C4 823:11 9..275	0.86	g21296 53	1879	1.3e- 154	myosin heavy chain

173261	ATU035 201	ATL8S2 4961:1 ..312	nap					9	ATL8S2 4961:1 96..24 7	0.86	g43888 23	33	353	7.1e- 27	AC006 528) hypoth etical protei n [Arabi dopsis thalia na]
173262	ATU035 202	ATL8C4 2276:1 ..545	nap						ATL8C4 2276:5 1..518	0.85	g49268 26	33	473	1.7e- 30	AC004 135) T17H7. 11 [Arabi dopsis thalia na]
173263	ATU035 203	ATL8C1 6685:2 543..4 845	nap						ATL8C1 6685:2 543..4 785	0.85	g24628 28	33	686	2.3e- 55	AF000 657) hypoth etical protei n [Arabi dopsis thalia na]
173264	ATU035 204	ATL8C2 6246:1 679..1	nap						ATL8C2 6246:1 232..2	0.85	g22447 65	33	657	3.2e- 53	(Z9733 5) hypoth

173265	ATU035 205	ATL8C4 6209:1 .1768	nap						16	0.85	g46999 38, g45744 06	33, 32	142, 225	6.2e- 15, 7.0e- 12	etical protei n [Arabi dopsis thalia na] (AC007 166) hypoeth etical protei n [Arabi dopsis thalia na]; (AF121 139) RIM2 protei n [Oryza sativa)
173266	ATU035 206	ATL8C2 3686:4 07..11 02	nap						ATL8C2 3686:4 07..99 4	0.84	g48951 86	33	993	4.1e- 65	(AC007 661) putati ve, growth regula tor protei n [Arabi dopsis thalia na] (AB018 343)
173267	ATU035 207	ATL8C3 2624:3	nap						ATL8C3 2624:3	0.84	g38823 21	33	242	9.5e- 22	(AB018 343)

173268	ATU035 208	ATL8C2 6493:1 ..1076	nap					66..42 47	0.84	g42637 77	33	602	9.8e- 59	KIAA0800 protein [Homo sapien s]
								ATL8C2 6493:5 08..10 09						(AC006 068) putati ve serine carbox ypepti dase II [Arabi dopsis thalia na]
173269	ATU035 209	ATL8C4 6721:1 471..1 091	nap					ATL8C4 6721:1 445..1 091	0.84	g21296 98	33	198	5.4e- 18	protein kinase ATN1 (EC 2.7.1. -) - Arabid opsis thalia na [Arabi dopsis thalia na]
173270	ATU035 210	ATL8S2 9131:5 37..1	nap					ATL8S2 9131:4 88..29	0.83	g17083 19	33	280	4.0e- 27	CELL CYCLE PROTEI N KINASE

173271	ATU035 211	ATL8C3 7737:1 ..498	nap					ATL8C3 7737:2 78..45 7	0.83	g40391 55	33	170	8.5e- 19	HSK1 [Schiz osacch aromyc es pombel] (AF104 258) putati ve copper - induci ble 35.6 kDa protei n [Festu ca rubra]
173272	ATU035 212	ATL8C1 8066:5 38..1	nap					ATL8C1 8066:3 57..22 6	0.83	g32362 38	33	424	5.8e- 35	(AC004 684) putati ve ARF1 GTPase activa ting protei n [Arabi dopsis thalia na]
173273	ATU035 213	ATL8C2 261:96 1..1	nap					ATL8C2 261:85 0..56	0.83	g47739 20	33	579	8.7e- 68	(AF147 259) F10A2. 17 gene

173274	ATU035 214	ATL8C4 064:24 78..18 04	nap					ATL8C4 064:23 02..18 80	0.83	g42636 49	33	418	1.3e- 37	(AC006 136) hypoth etical protei n [Arabi dopsis thalia na]
173275	ATU035 215	ATL8C2 8520:1 ..2490	nap					ATL8C2 8520:1 58..24 90	0.82	g46783 81	33	945	5.0e- 75	(AL049 656) putati ve protei n [Arabi dopsis thalia na]
173276	ATU035 216	ATL8C2 6048:2 366..1 318	nap					ATL8C2 6048:2 360..1 318	0.82	g44907 56	33	320	1.4e- 11	(AL035 708) hypoth etical protei n [Arabi dopsis thalia na]
173277	ATU035 217	ATL8C4 3060:1 ..939	nap					ATL8C4 3060:7 8..863	0.82	g43371 94	33	615	2.0e- 39	(AC006 403) putati ve

173278	ATU035 218	ATL8C4 2492:1 ..489	nap					ATL8C4 2492:3 73..48 9	0.82		g46894 52	33	78	0.37	(AC006 267) putati ve transp oson protei n [Arabi dopsis thalia na]
173279	ATU035 219	ATL8C4 5920:2 64..93 0	nap					ATL8C4 5920:2 94..92 0	0.82		g26606 66	33	128	6.4e- 07	(AC002 342) putati ve polyga lactur onase [Arabi dopsis thalia na]
173280	ATU035 220	ATL8C1 555:16 39..31 27	nap					ATL8C1 555:16 39..30 85	0.82		g43887 22	33	706	1.7e- 55	(AC006 413) putati ve centro meric protei

173281	ATU035 221	ATL8C3 7428:1 43..89 4	nap					ATL8C3 7428:2 54..88 3	0.82	g33343 49	33	407	n [Arabi dopsis thalia na]
													GLYCYL -TRNA SYNTHE TASE (GLYCI NE-- TRNA LIGASE) (GLYRS) [Arabi dopsis thalia na]
173282	ATU035 222	ATL8C2 7956:6 90..1	nap					ATL8C2 7956:3 89..11 4	0.82	g44552 50	33	110	(AL035 523) putati ve protei n [Arabi dopsis thalia na]
173283	ATU035 223	ATL8C2 2910:3 477..7 18	nap					ATL8C2 2910:3 477..2 443	0.81	g45126 89	33	102	(AC006 931) hypoth etical protei n [Arabi dopsis thalia na]
												4.2e- 05	

173284	ATU035 224	ATL8C2 4632:1 ..1268	nap			ATL8C2 4632:1 15..11 90	0.81	g45859 36	33	1241	9.1e- 127	(AC007 211) putati ve helica se [Arabi dopsis thalia na]
173285	ATU035 225	ATL8C1 8734:9 98..55 3	nap			ATL8C1 8734:7 49..55 3	0.81	g45875 95	33	203	2.0e- 10	(AC006 951) putati ve prolin e-rich protei n APG [Arabi dopsis thalia na]
173286	ATU035 226	ATL8S3 937:13 1..547	nap			ATL8S3 937:13 1..539	0.80	g25066 43	33	241	1.3e- 22	HYPOTH ETICAL 42.6 KD PROTEI N IN PEPT- PHOQ INTERG ENIC REGION [Esche richia coli]
173287	ATU035 227	ATL8C3 4462:5 49..1	nap			ATL8C3 4462:4 85..40	0.80	g29600 90	33	378	2.5e- 37	(AL022 121) dppA [Mycob

173288	ATU035 228	ATL8C2 5340:1 221..1	nap							ATL8C2 5340:1 096..1 61	0.80		g45859 12	33	682	1.9e- 34	(AC006 298) hypoth etical protei n [Arabi dopsis thalia na]	acteri um tuberc ulosis J
173289	ATU035 229	ATL8C2 000:15 96..21 5	nap							ATL8C2 000:15 90..21 5	0.80		g32732 43	33	338	8.0e- 25	(AB004 660) NLS recept or [Oryza sativa J]	
173290	ATU035 230	ATL8C1 1330:1 05..60 8	nap							ATL8C1 1330:1 30..31 5	0.80		g44671 43	33	774	1.2e- 71	(AL035 540) Phosph olipas e like protei n [Arabi dopsis thalia na]	
173291	ATU035 231	ATL8C9 416:10 96..1	nap							ATL8C9 416:98 2..170	0.80		g30212 74	33	729	8.8e- 74	(AL022 347) serine /threo nine kinase	

173292	ATU035 232	ATL8S9 368:44 4..1	nap					ATL8S9 368:39 2..16	0.79	g21473 27	33	208	5.0e- 17	- like protei n [Arabi dopsis thalia na]
173293	ATU035 233	ATL8C5 475:1. .1390	nap					ATL8C5 475:21 4..139 0	0.79	g38829 98	33	83	7.0e- 06	(AF073 482) myotub ularin relate d protei n 7 [Homo sapien s]
173294	ATU035 234	ATL8C2 0567:7 36..1	nap					ATL8C2 0567:7 36..32	0.79	g40068 24	33	596	4.9e- 57	(AC005 970) hypoth etical protei

173295	ATU035 235	ATL8C4 607:76 9..1	nap					ATL8C4 607:68 5..500	0.78	g43888 21	33	679	1.6e- 50	n [Arabi dopsis thalia na] (AC006 528) putati ve mudrA transp osase protei n [Arabi dopsis thalia na]
173296	ATU035 236	ATL8C4 6692:4 21..16 08	nap					ATL8C4 6692:4 21..15 68	0.78	g36500 38	33	287	9.0e- 16	(AC005 396) hypoth etical protei n [Arabi dopsis thalia na]
173297	ATU035 237	ATL8S1 4446:4 28..1	nap					ATL8S1 4446:4 28..78	0.78	g26219 13	33	121	7.3e- 09	(AE000 859) rubrer ythrin [Metha nobact erium thermo autotr ophicu m]
173298	ATU035	ATL8C1	nap					ATL8C1	0.78	g48039	33	123	9.4e-	(AC006

238	8597:1 ..2768					8597:8 25..23 10	59			12	202) putati ve chloro plast nucleo id DNA bindin g protei n [Arabi dopsis thalia nal]
173299	ATU035 239	ATL8C6 114:94 3..1	nap			ATL8C6 114:94 3..38	g28296 5	33	273	5.7e- 25	transf orming protei n (myb) homolo g (clone myb.Ph 3) - garden petuni a [Petun ia x hybrid a]
173300	ATU035 240	ATL8S4 995:1. .507	nap			ATL8S4 995:51 ..465	g21305 71	33	174	1.9e- 19	(U9677 1) unknow n [Prevo tella bryant ii]

173301	ATU035 241	ATL8C1 7587:6 116..5 597	nap				ATL8C1 7587:6 069..5 597	0.76	929795 42	33	380	2.3e- 32	(AC003 680) putati ve Ser/Th r kinase [Arabi dopsis thalia na]
173302	ATU035 242	ATL8C1 9614:3 97..20 12	nap				ATL8C1 9614:3 97..15 71	0.76	945672 98	33	931	5.9e- 92	(AC006 918) putati ve MuDR MURA transp osase [Arabi dopsis thalia na]
173303	ATU035 243	ATL8C4 5172:1 785..8 07	nap				ATL8C4 5172:1 595..8 07	0.76	946801 80	33	709	2.7e- 41	(AF111 709) polypr oteins [Oryza sativa subsp. indica]
173304	ATU035 244	ATL8C4 8537:1 ..798	nap				ATL8C4 8537:4 8..798	0.76	934260 40	33	254	1.7e- 19	(AC005 168) hypoth etical protei n [Arabi dopsis

173305	ATU035 245	ATL8C7 792:47 7..145 3	nap				ATL8C7 792:48 5..144 3	0.75	g45126 60	33	463	1.5e- 35	thalia nal (AC006 931) hypoth etical protei n [Arabi dopsis thalia nal]
173306	ATU035 246	ATL8C1 6699:1 ..1478	nap				ATL8C1 6699:5 3..147 8	0.74	g45396 60	33	1811	2.7e- 184	(AF061 282) polypr oteins [Sorgh um bicolo r]
173307	ATU035 247	ATL8S7 476:51 4..19	nap				ATL8S7 476:46 7..19	0.74	g11838 39	33	154	0.094	(D8313 8) unknow n [Pseud omonas aerugi nosa]
173308	ATU035 248	ATL8S1 0188:4 5..558	nap				ATL8S1 0188:2 97..15 6	0.73	g45858 77	33	223	5.7e- 21	(AC005 850) Hypoth etical protei n [Arabi dopsis thalia nal]
173309	ATU035 249	ATL8C4 1858:1	nap				ATL8C4 1858:1	0.73	g29807 82	33	480	9.2e- 49	(AL022 198)

173310	ATU035 250	544..6 28	nap				504..6 28	0.72	g58637 9	33	62	0.0020	hypothetical protein [Arabidopsis thaliana]
		ATL8S1 9351:5 63..77					ATL8S1 9351:3 97..77						HYPOTHETICAL 26.1 KD PROTEIN IN POP4-SH1 INTERGENIC REGION [Saccharomyces cerevisiae]
173311	ATU035 251	ATL8C3 780:1. .604	nap				ATL8C3 780:31 8..46	0.72	g21298 32	33	442	2.9e-34	heat shock transcription factor 5 - soybean [Glycine max]
173312	ATU035 252	ATL8C1 9209:2 78..69 1	nap				ATL8C1 9209:2 89..68 8	0.72	g29820 91	33	319	1.7e-32	Crystallin Structure Of

173313	ATU035 253	ATL8C1 8886:4 01..1	nap							ATL8C1 8886:4 01..27	0.71	g48120 3	33	76	0.0098	SNAP- 25 protei n - chicke n []	The Nad Comple x Of Human Deoxyh ypusin e Syntha se []
173314	ATU035 254	ATL8C3 9049:1 ..469	nap							ATL8C3 9049:6 3..430	0.71	g27603 27	33	326	1.4e- 34	(AC002 130) FIN21. 12 [Arabi dopsis thalia na]	
173315	ATU035 255	ATL8C2 7621:1 ..970	nap							ATL8C2 7621:1 18..88 9	0.71	g31281 88	33	751		(AC004 521) putati ve beta- glucos idase [Arabi dopsis thalia na]	
173316	ATU035 256	ATL8C1 1711:1 ..1551	nap							ATL8C1 1711:2 21..14 54	0.70	g21173 69	33	36	0.060	prosta glandi n omega- hydrox	

173317	ATU035 257	ATL8C2 3012:6 81..1	nap					ATL8C2 3012:6 81..11 5	0.70	g43888 21	33	889	3.9e- 80	(AC006 528) putati ve mudrA transp osase protei n [Arabi dopsis thalia na]	ylase (EC 1.14.1 5.-) cytoch rome P450 4A4 - rabbit []
173318	ATU035 258	ATL8S2 3708:4 82..1	nap					ATL8S2 3708:4 82..30	0.70	g33557 01	33	429	4.9e- 41	(AL031 124) 3- isopro pymal ate dehydr atase large subuni t [Strep tomyce s coelic olor]	
173319	ATU035	ATL8C2	nap					ATL8C2	0.70	g46801	33	755	7.7e-	(AF111	

173320	259	0853:1 ..878						0853:1 9..822	80					65	709) polypr otein [Oryza sativa subsp. indica]
173320	ATU035 260	ATL8C9 507:1. .1860	nap					ATL8C9 507:18 9..173 4	0.70	g32419 45	33	411	3.0e- 25	(AC004 625) unknow n protei n [Arabi dopsis thalia na]	
173321	ATU035 261	ATL8C4 1978:2 968..5 241	nap					ATL8C4 1978:2 968..4 985	0.69	g42638 31	33	1996	2.4e- 211	(AC006 067) putati ve revers e transc riptas e [Arabi dopsis thalia na]	
173322	ATU035 262	ATL8C4 4182:1 057..1	nap					ATL8C4 4182:1 014..1 78	0.69	g45875 78	33	1439	6.3e- 150	(AC006 550) Belong s to PF 000 04 ATPase s associ	

173323	ATU035 263	ATL8C7 87:177 9..77	nap				ATL8C7 87:172 1..77	0.69	g43888 29	33	1447	4.8e- 143	ated with various cellular activities. [Arabidopsis thaliana] (AC006 528) putative polyprotein with a Zn-finger CCHC type domain (prosite: QDO C50158) and a DDE integrase signature motif [Arabidopsis thaliana]
173324	ATU035 264	ATL8C5 0136:7	nap				ATL8C5 0136:6	0.69	g30154 88	33	634	2.7e- 64	(U5847 4)

173325	ATU035 265	ATL8C5 354:11 75..1	nap					62..28 4	0.68	g29807 79	33	845	6.8e- 91	(AL022 198) putati ve protei n [Arabi dopsis thalia na]
173326	ATU035 266	ATL8C2 9087:8 71..1	nap					ATL8C2 9087:8 54..35 5	0.68	g48952 42	33	551	1.1e- 44	(AC007 659) putati ve transc riptio n factor [Arabi dopsis thalia na]
173327	ATU035 267	ATL8S7 661:58 4..1	nap					ATL8S7 661:26 3..27	0.68	g46999 44	33	213	1.1e- 18	(AC007 166) hypoth etical protei n [Arabi

173328	ATU035 268	ATL8S2 2787:1 67..56 2	nap				ATL8S2 2787:1 67..47 2	0.68	g24993 14	33	269	8.9e- 26	dopsis thalia na]
													NADH- UBIQUI NONE OXIDOR EDUCTA SE CHAIN 4 (NADH DEHYDR OGENAS E 1, CHAIN 4) (NDH- 1, CHAIN 4) [Therm us aquati cus thermo philus]
173329	ATU035 269	ATL8C1 7453:1 ..1434	nap				ATL8C1 7453:2 49..13 29	0.67	g24963 15	33	68	0.022	HYPOTH ETICAL PROTEI N MG139 HOMOLO G [Mycop lasma pneumo niae]
173330	ATU035	ATL8C2	nap				ATL8C2	0.67	g33675	33	1243		(AL031

173331	270	7468:1 767..1	nap				7468:1 424..1 75	0.66	g41382 65	33	281	2.9e- 22	135) putati ve protei n [Arabi dopsis thalia na]
	ATU035 271	ATL8C4 4115:1 ..570	nap				ATL8C4 4115:1 88..32 8						(AJ006 228) Avr9 elicit or respon se protei n [Nicot iana tabacu m]
173332	ATU035 272	ATL8C4 8777:4 12..1	nap				ATL8C4 8777:4 12..40	0.66	g44690 13	33	298	1.8e- 29	(AL035 602) hypo thetical protei n [Arabi dopsis thalia na]
173333	ATU035 273	ATL8C2 5933:1 ..737	nap				ATL8C2 5933:1 0..477 , ATL8C2 5933:6 93..67 2	0.66, 0.53	g12277 1	33	31	0.33	TRANSC RIPTIO N FACTOR HBP-1A (HISTO NE- SPECIF

173337	ATU035 277	ATL8C3 6958:1 04..26 98	nap				ATL8C3 6958:1 04..24 89	0.65	g37859 84	33	1167	5.9e- 124	(AC005 560) putati ve revers e transc riptas e [Arabi dopsis thalia na]
173338	ATU035 278	ATL8C9 635:14 10..18 7	nap				ATL8C9 635:14 10..25 4	0.65	g16585 04	33	126	3.7e- 10	(U7546 7) Rga [Droso phila melano gaster]
173339	ATU035 279	ATL8C1 0401:2 834..1	nap				ATL8C1 0401:2 681..1 437	0.64	g45811 10	33	1247		(AC005 825) putati ve retrot ranspo son polypr otein [Arabi dopsis thalia na]
173340	ATU035 280	ATL8C4 5244:1 ..1324	nap				ATL8C4 5244:1 84..11 35	0.64	g45861 17	33	468	1.6e- 38	(AL049 638) putati ve protei n [Arabi

173341	ATU035 281	ATL8C4 3708:1 792..1 82	nap					ATL8C4 3708:1 694..8 10	0.64	g44328 07	33	1088		dopsis thalia nal (AC006 570) putati ve polypr otein [Arabi dopsis thalia nal]
173342	ATU035 282	ATL8C1 7420:7 83..1	nap					ATL8C1 7420:4 46..26	0.64	g43888 25	33	691	1.3e- 60	(AC006 528) putati ve pol polypr otein with revers e transc riptas e domain (Pfam: PF0007 8) [Arabi dopsis thalia nal]
173343	ATU035 283	ATL8C9 619:1. .1145	nap					ATL8C9 619:39 0..108 0	0.64	g40068 68	33	263	2.2e- .20	(Z9970 7) putati ve protei n [Arabi

173344	ATU035 284	ATL8S5 012:48 9..1	nap					ATL8S5 012:48 9..89	0.64	922934 19	33	300	3.0e- 28	dopsis thalia na] (AF007 800) xylulo se kinase [Pseud omonas fluore scens]
173345	ATU035 285	ATL8C4 3447:1 730..3 38	nap					ATL8C4 3447:1 661..3 38	0.64	934618 49	33	327		(AC005 315) putati ve cytoch rome P450 [Arabi dopsis thalia na]
173346	ATU035 286	ATL8S2 9380:1 ..614	nap					ATL8S2 9380:1 16..44 7	0.64	933778 47	33	378	3.6e- 23	(AF076 274) No defini tion line found [Arabi dopsis thalia na]
173347	ATU035 287	ATL8C9 219:40 48..26 77	nap					ATL8C9 219:39 40..26 77	0.63	946461 96	33	723		(AC007 230) Contai ns simila rity

173351	ATU035 291	ATL8C1 9817:1 083..1	nap					ATL8C1 9817:9 58..21 1	0.62	g42181 42	33	1204	4.9e- 118	predic ted protei ns (GB:AF 025472 , AF0406 4 and AF0262 12) [Arabi dopsis thalia na]
173352	ATU035 292	ATL8C3 8382:8 87..1	nap					ATL8C3 8382:6 22..11 1	0.62	g40493 53	33	677	3.3e- 56	(AL034 567) putati ve protei n [Arabi dopsis thalia na]
173353	ATU035 293	ATL8S3 0687:1 ..456	nap					ATL8S3 0687:2 37..82	0.61	g17094 92	33	135	6.5e- 09	PROBAB LE OXIDOR

173354	ATU035 294	ATL8C1 023:92 7..1	nap				ATL8C1 023:91 4..18	0.61	g33778 31	33	1238	6.6e- 117	EDUCTA SE ORDL [Esche richia coli] (AF075 598) simila r to maize transp oson MuDR mudrA (GB:M7 6978) [Arabi dopsis thalia nal]
173355	ATU035 295	ATL8C1 0138:9 01..1	nap				ATL8C1 0138:6 32..49 4	0.60	g45859 31, g43097 55	33, 31	198, 728		(AC007 211) hypothe tical protei n [Arabi dopsis thalia nal]; (AC006 217) putati ve transp osase [Arabi dopsis thalia

173361	ATU035 301	ATL8S1 9495:1 ..526	nap					ATL8S1 9495:1 8..493	0.59	g14862 53	33	216	2.4e- 18	(D8662 2) L- sorbos e dehydr ogenas e, FAO depend ent [Glucos nobact er oxydan s]	to hypoth etical gene B0495. 7 gb 687 822 from C. elegan s cosmid gb U21 317. [Arabi dopsis thalia na]
173362	ATU035 302	ATL8C4 9123:6 27..25 1	nap					ATL8C4 9123:3 88..25 1	0.58	g30803 61	33	217	1.6e- 08	(AL022 580) hypoth etical protei n [Arabi	

173363	ATU035 303	ATL8C3 8842:2 703..7 41	nap					ATL8C3 8842:2 565..7 41	0.58	g48352 30	33	75	0.98	(AL049 862) putati ve LEA protei n [Arabi dopsis thalia na]
173364	ATU035 304	ATL8C4 6472:1 ..567	nap					ATL8C4 6472:2 15..46 3	0.58	g36953 82	33	273	1.3e- 26	(AF096 370) contai ns simila rity to Arabid opsis thalia na retrot ranspo son Tall-1 (GB:L4 7193) [Arabi dopsis thalia na]
173365	ATU035 305	ATL8C1 4380:1 ..557	nap					ATL8C1 4380:2 43..55 7	0.58	g44552 28	33	334	8.1e- 50	(AL035 440) putati ve protei n

173366	ATU035 306	ATL8S2 880:78 ..540	nap						ATL8S2 880:81 ..446	0.58		g28322 44	33	591	7.6e- 39	[Arabi dopsis thalia na] (AF031 569) hypoth etical protei n [Zea mays]
173367	ATU035 307	ATL8C4 4787:1 ..1265	nap						ATL8C4 4787:8 70..15 8	0.58		g28646 20	33	138	4.0e- 07	(AL021 811) hypoth etical protei n [Arabi dopsis thalia na]
173368	ATU035 308	ATL8C4 3891:1 448..1	nap						ATL8C4 3891:1 448..5 8	0.58		g27896 60	33	424		(AF040 102) p105 [Arabi dopsis thalia na]
173369	ATU035 309	ATL8C4 97:126 8..365 8	nap						ATL8C4 97:126 8..360 7	0.57		g27087 43	33	1646	1.2e- 163	(AC003 952) putati ve Tal-1- like revers e transc riptas e

173370	ATU035 310	ATL8C3 594:78 4..1	nap					ATL8C3 594:78 4..24	0.57	g17089 71	33	359	3.2e- 32	[Arabi dopsis thalia na] (R)- MANDEL ONITRI LE LYASE- ISOFOR M 1 PRECUR SOR (HYDRO XYNITR ILE LYASE 1) (R)- OXYNIT RILASE 1) [Prunu s seroti na]
173371	ATU035 311	ATL8C2 3307:1 ..692	nap					ATL8C2 3307:1 25..66 2	0.56	g26493 70	33	421	7.2e- 23	(AE001 020) conser ved hypoth etical protei n [Archaeo globus fulgidus]
173372	ATU035	ATL8C1	nap					ATL8C1	0.56	g46462	33	228	0.0005	(AC007

173373	312	8650:1 948..6 77	nap					8650:1 948..6 77	0.56	g34452 01	33	805	2.1e- 71	235) hypoth etical protei n [Arabi dopsis thalia na] (AC004 786) unknow n protei n [Arabi dopsis thalia na]
173374	ATU035 313	ATL8C3 3287:1 032..2 55	nap					ATL8C3 3287:6 33..25 5	0.55	g45393 98	33	677	1.3e- 69	(AL035 526) ion transp orter- like protei n [Arabi dopsis thalia na]
173375	ATU035 315	ATL8C4 1435:1 ..673	nap					ATL8C4 1435:2 85..64 6	0.55	g39150 31	33	425	1.9e- 44	ACYL- [Gossy pium hirsut um]
173376	ATU035 316	ATL8S1 2909:4 93..1	nap					ATL8S1 2909:4 40..28	0.55	g26129 11	33	165	3.1e- 15	(AF015 825) hypoth etical

173377	ATU035 317	ATL8S7 852:1. .571	nap				ATL8S7 852:23 6..346	0.55	g37860 13	33	92	1.1e- 09	(AC005 499) hypoth etical protei n [Arabi dopsis thalia na]	altron ate dehydr atase [Bacil lus subtil is]
173378	ATU035 318	ATL8C3 2753:7 30..1	nap				ATL8C3 2753:6 92..9	0.54	g28282 88	33	928	9.4e- 95	(AL021 687) repl lication A protei n-like [Arabi dopsis thalia na]	
173379	ATU035 319	ATL8S2 9266:1 ..408	nap				ATL8S2 9266:1 61..37 3	0.54	g11698 21	33	174	0.035	GALACT OKINAS E []	
173380	ATU035 320	ATL8C3 2237:7 87..1	nap				ATL8C3 2237:5 91..53	0.54	g45811 64	33	475	7.1e- 34	(AC006 220) putati ve polyp rotein [Arabi	

173381	ATU035 321	ATL8C8 345:65 7..1	nap					ATL8C8 345:61 3..408	0.53	g31932 94	33	388	1.3e- 34	dopsis thalia nal (AF069 298) simila r to revers e transc riptas es (Pfam: rvt.hm m, score: 53.76) [Arabi dopsis thalia nal]
173382	ATU035 322	ATL8C6 925:20 61..40 2	nap					ATL8C6 925:15 76..40 2	0.53	g33778 31	33	678	2.7e- 75	(AF075 598) simila r to maize transp oson MuDR mudrA (GB:M7 6978) [Arabi dopsis thalia nal]
173383	ATU035 323	ATL8C2 0178:2 687..3 264	nap					ATL8C2 0178:2 687..3 205	0.53	g16167 85	33	760	2.0e- 197	(U7112 1) pyruva te

173384	ATU035 324	ATL8C2 7912:1 050..1	nap							ATL8C2 7912:9 27..74	0.53		g44163 02	33	1548		decarb oxylas e [Arabi dopsis thalia na]
173385	ATU035 325	ATL8C1 813:1. .833	nap							ATL8C1 813:60 9..739	0.53		g48369 03	33	396	6.7e- 32	(AF105 716) copia- type pol polypr oteins [Zea mays]
173386	ATU035 326	ATL8S1 087:62 0..1	nap							ATL8S1 087:35 4..19	0.52		g39159 19	33	298	7.1e- 22	(AC007 369) Simila r to phosph ate transp orter protei ns [Arabi dopsis thalia na]
																	HYPOTH ETICAL 65.6 KD PROTEI N RV0083 [Mycob acteri um

173387	ATU035 327	ATL8S6 066:57 8..1	nap							ATL8S6 066:52 0..90	0.51	g58537 1	33	358	6.0e- 35	PYRUA TE KINASE (PK) [Bacil lus stearo thermo philus]	tuberc ulosis]
173388	ATU035 328	ATL8C3 4292:2 480..2 74	nap							ATL8C3 4292:1 144..2 74	0.50	g48503 84	33	304	2.6e- 23	(AC007 357) F3F19. 3 [Arabi dopsis thalia na]	
173389	ATU035 329	ATL8C1 6041:6 11..1	nap							ATL8C1 6041:5 24..68	0.50	g21905 49	33	612	7.6e- 63	(AC001 229) No defini tion line found [Arabi dopsis thalia na]	
173390	ATU035 330	ATL8C1 1417:1 082..1	nap							ATL8C1 1417:6 81..16	0.50	g45393 01	33	215	1.2e- 12	(AL049 480) putati ve mitoch ondria l protei	

173391	ATU035 331	ATL8S3 278:50 8..1	nap					ATL8S3 278:16 7..33	0.49		g31081 61	33	300	2.0e- 24	(AF061 106) putati ve monosa cchari de transp orter 1 [Petun ia x hybrid a]
173392	ATU035 332	ATL8C4 4836:8 47..12 0	nap					ATL8C4 4836:5 15..12 0	0.48		g31933 21	33	295	7.4e- 26	(AF069 299) No defini tion line found [Arabi dopsis thalia na]
173393	ATU035 333	ATL8S2 76:1.. 576	nap					ATL8S2 76:67. .264	0.48		g17070 20	33	282	5.1e- 22	(U7872 1) hypoth etical protei n [Arabi dopsis thalia na]

173394	ATU035 334	ATL8C4 3779:1 063..1	nap			ATL8C4 3779:8 71..63 8	0.47	g21479 56	33	403	polyga lactur onase (EC 3.2.1. 15) - Prunus persic a [Prunu s persic a] al
173395	ATU035 335	ATL8S2 9521:5 84..46	nap			ATL8S2 9521:4 79..16 6	0.47	g10014 30	33	209	6.0e- 11 (D6399 9) ORF1 [Synec hocyst is sp.]
173396	ATU035 336	ATL8C2 2407:6 37..14 26	nap			ATL8C2 2407:6 49..13 56	0.47	g22448 64	33	209	1.2e- 11 (Z9733 7) hypoth etical protei n [Arabi dopsis thalia na]
173397	ATU035 337	ATL8C4 3335:1 ..1539	nap			ATL8C4 3335:1 88..15 34	0.46	g34618 40	33	1222	(AC005 315) putati ve revers e transc riptas e [Arabi

173398	ATU035 338	ATL8C9 231:13 72..14 3	nap					ATL8C9 231:69 0..149	0.46	949144 35	33	186	2.5e- 13	dopsis thalia nal (AL050 351) NAD(P) H oxidor educta se, isofla vone reduct ase- like protei n [Arabi dopsis thalia nal]
173399	ATU035 339	ATL8C2 6860:9 98..1	nap					ATL8C2 6860:7 87..50 1	0.46	946789 39	33	994	2.5e- 94	(AL049 711) putati ve protei n [Arabi dopsis thalia nal]
173400	ATU035 340	ATL8C4 6336:2 198..3 093	nap					ATL8C4 6336:2 198..3 061	0.46	919316 50	33	513	4.2e- 47	(U9597 3) diseas e resist ance protei n RPM1 isolog

173401	ATU035 341	ATL8C4 4081:3 57..12 08	nap					ATL8C4 4081:3 57..93 7	0.45	g45672 54	33	303	2.5e- 26	[Arabi dopsis thalia na] (AC007 070) putati ve myb protei n [Arabi dopsis thalia na]
173402	ATU035 342	ATL8C3 3854:1 060..1	nap					ATL8C3 3854:1 060..8 3	0.45	g45859 31	33	333		(AC007 211) hypoth etical protei n [Arabi dopsis thalia na]
173403	ATU035 343	ATL8C2 629:16 12..1	nap					ATL8C2 629:15 99..42	0.45	g44163 01	33	1254	3.2e- 94	(AF105 716) gag protei n [Zea mays]
173404	ATU035 344	ATL8S1 3653:4 6..549	nap					ATL8S1 3653:4 6..517	0.45	g42104 55	33	250	2.8e- 27	(AB017 765) OMPDca se- OPRTas e [Trypa nosoma cruzi]

173405	ATU035 345	ATL8C1 7861:1 124..5 2	nap			ATL8C1 7861:7 83..52	0.45	g43888 21	33	528	(AC006 528) putati ve mudra transp osase protei n [Arabi dopsis thalia nal]
173406	ATU035 346	ATL8C3 5835:1 ..804	nap			ATL8C3 5835:5 42..78 7	0.44	g33273 95	33	205	(AC004 483) hypoth etical protei n [Arabi dopsis thalia nal]
173407	ATU035 347	ATL8C1 4451:1 888..1	nap			ATL8C1 4451:1 888..1 2	0.44	g36412 52	33	479	(AF053 127) leucin e-rich recept or- like protei n kinase [Malus domest ical]
173408	ATU035 348	ATL8C4 4006:1 81..64 8	nap			ATL8C4 4006:1 81..58 3	0.44	g27393 73	33	237	(AC002 505) putati ve

173409	ATU035 349	ATL8C1 7875:2 37..52 4	nap						0.44	g47739 10	33	231		Flavonol 3-O-glucosyltransferase [Arabidopsis thaliana]
173410	ATU035 350	ATL8C5 558:1. .722	nap						0.43	g44067 80	33	697	6.8e-63	(AC006532) putative multising membrane protein [Arabidopsis thaliana]
173411	ATU035 351	ATL8S2 0293:1 ..556	nap						0.43	g45394 60	33	173	4.7e-10	(AL049500) putative

173412	ATU035 352	ATL8C2 0558:1 828..3 93	nap						1	ATL8C2 0558:1 771..3 93	0.42	g99721	33	515	4.2e- 55	ve protei n [Arabi dopsis thalia na]
173413	ATU035 353	ATL8C1 6248:1 ..2095	nap							ATL8C1 6248:1 3..195 4	0.42	g22447 65	33	501	1.2e- 39	(Z9733 5) hypoth etical protei n [Arabi dopsis thalia na]
173414	ATU035 354	ATL8C4 6774:1 112..1	nap							ATL8C4 6774:1 112..1 68	0.41	g22448 96	33	257	1.3e- 19	(Z9733 8) simila r to

173422	ATU035 362	ATL8S9 366:46 1..1	nap										g47045 62	33	681	3.1e- 65	(AF102 270) fumara se C [Pseud omonas putida]	SUBUNI T [Helic obacte r. pylori 26695]
173423	ATU035 363	ATL8C3 9186:1 691..2 368	nap										g45388 96	33	507	1.2e- 38	(AL049 482) putati ve protei n [Arabi dopsis thalia nal]	
173424	ATU035 364	ATL8C4 8949:1 ..202	nap										g28326 88	33	186	7.4e- 15	(AL021 712) hypoth etical protei n [Arabi dopsis thalia nal]	
173425	ATU035 365	ATL8C5 33:133 5..646	nap										g45389 66	33	648	1.5e- 69	(AL049 488) putati ve protei	

173426 173427 173428
 173426 173427 173428
 173426 173427 173428

173426	ATU035 366	ATL8S9 790:1. .707	nap							1.00	g21207 36	32	229	5.2e- 21	X-Pro dipt idyl- peptid ase (EC 3.4.14 .11) - Xantho monas maltop hilia [Steno tropho monas maltop hilia]	n [Arabi dopsis thalia na]
173427	ATU035 367	ATL8C1 272:57 65..62 93	nap								g26606 73	33	446	2.3e- 45	(AC002 342) unknow n protei n [Arabi dopsis thalia na]	n [Arabi dopsis thalia na]
173428	ATU035 368	ATL8C2 0950:1 ..900	nap								g31579 28	33	470	1.0e- 37	(AC002 131) Simila r to fumary laceto acetat e	(AC002 131) Simila r to fumary laceto acetat e

173429	ATU035 369	ATL8C4 2578:6 54..1	nap							g42204 56	33	445	9.1e- 41	(AC006 216) Strong simila rity to [Arabi dopsis thalia nal]	hydrol ase, gb L41 670 from Emeric ella nidula ns. [Arabi dopsis thalia nal]
173430	ATU035 370	ATL8S1 4685:6 76..1	nap							g12993 9	33	120	4.0e- 09	POLYGA LACTUR ONASE 2A PRECUR SOR (PG- 2A) (PECTI NASE) [Lycop ersico n escole ntum]	
173431	ATU035 371	ATL8S1 6167:5	nap							g45080 69	33	528	4.1e- 51	(AC005 882)	

173436 ATU035 ATL8C3 10:135 5..1 nap 949143 33 1095 5.7e-101 dopsis thalia na]

173436	ATU035 376	ATL8C3 10:135 5..1	nap						949143 61	33	1095	5.7e- 101	(AC007 289) putati ve revers e transc riptas e [Arabi dopsis thalia na]
173437	ATU035 377	ATL8C2 7644:2 474..2 777	nap						942630 48	33	149		(AC005 142) putati ve hydrol ase [Arabi dopsis thalia na]
173438	ATU035 378	ATL8C2 4339:1 ..1735	nap						931423 03	33	737	4.3e- 73	(AC002 411) Strong simila rity to MRP- like ABC transp orter gb U92 650 from

173439	ATU035 379	ATL8C4 9813:1 ..1323	nap										942180 11	33	459	2.7e- 48	A. thalia na and canali cular multi- drug resist ance protei n gbL49 379 from Rattus norveg icus. [Arabi dopsis thalia na]
173440	ATU035 380	ATL8S2 6750:5 55..1	nap										921905 54	33	502		(AC001 229) Simila r to Arabid opsis cytoch rome

173441	ATU035 381	ATL8C2 2612:5 47...46 6	nap									g47339 72	33	132	1.9e- 09	P450 CYP90 (gbIX8 7367). [Arabi dopsis thalia nal] (AC007 264) putati ve 14- 3-3 protei n GF14 PSI [Arabi dopsis thalia nal]
173442	ATU035 382	ATL8S2 4875:5 71...19 8	nap									g34026 90	33	200	3.2e- 16	(AC004 697) hypoth etical protei n, 3', partia l [Arabi dopsis thalia nal]
173443	ATU035 383	ATL8C1 6543:5 75...1	nap									g29795 43	33	588	6.4e- 52	(AC003 680) hypoth etical protei n [Arabi dopsis

[illegible]

173444	ATU035 384	ATL8S1 3810:2 64..51 8	nap								g45444 48	33	417	4.3e- 37	thalia na] (AC006 592) putati ve revers e transc riptas e [Arabi dopsis thalia na]
173445	ATU035 385	ATL8S2 0414:2 9..379	nap								g46266 3	33	201	4.2e- 08	A/G- SPECIF IC ADENIN E GLYCOS YLASE [Salmo nella typhim urium]
173446	ATU035 386	ATL8C6 807:15 35..1	nap								g28299 26	33	159	1.9e- 09	(AC002 291) Hypoth etical protei n [Arabi dopsis thalia na]
173447	ATU035 387	ATL8C4 9104:8 18..1	nap								g14217 41	33	389	7.6e- 36	(U5477 0) cytoch rome

[illegible]

173455	ATU035 395	ATL8C4 1923:1 34..34 9	nap									g43143 79	33	133	5.1e- 10	(AC006 232) unknown protein [Arabi dopsis thalia na]	13 [Arabi dopsis thalia na]
173456	ATU035 396	ATL8S2 5737:4 99..1	nap									g31832 45	33	279	8.5e- 28	PUTATI VE GLUTAM INE SYNTH E TASE (GLUTA MATE-- AMMONI A LIGASE) [Esche richia colil]	PUTATI VE GLUTAM INE SYNTH E TASE (GLUTA MATE-- AMMONI A LIGASE) [Esche richia colil]
173457	ATU035 397	ATL8S1 8684:4 54..12 9	nap									g48742 73	33	95	1.1e- 08	(AC007 354) Simila r to []	(AC007 354) Simila r to []
173458	ATU035 398	ATL8C2 1095:1 ..1190	nap									g40637 60	33	907	3.9e- 87	(AC005 561) putati ve POL3	(AC005 561) putati ve POL3

173459	ATU035 399	ATL8C3 1470:1 505..1	nap									g43888 21	33	521	7.1e- 42	protein [Arabi dopsis thalia na]
173460	ATU035 400	ATL8C3 3816:1 ..242	nap									g40278 99	33	134		(AF049 354) alpha- expans in precu sor [Nicot iana tabacu m]
173461	ATU035 401	ATL8C1 4440:1 070..1	nap									g22449 63	33	528	4.4e- 59	(Z9734 0) hypoth etical protei n [Arabi dopsis thalia na]

173462	ATU035 402	ATL8C4 5220:1 559..1	nap						927087 43	33	1380	2.6e- 117	(AC003 952) putati ve tal-1- like revers e transc riptas e [Arabi dopsis thalia na]
173463	ATU035 403	ATL8S3 207:99 ..494	nap						g33675 31	33	103	1.6e- 08	(AC004 392) Strong simila rity to [Arabi dopsis thalia na]
173464	ATU035 404	ATL8C2 1311:1 ..332	nap						g45811 41	33	251	7.8e- 18	(AC006 919) unknow n protei n [Arabi dopsis thalia na]
173465	ATU035 405	ATL8C3 3562:6 16..31 9	nap						g38761 46	33	51	0.0037	(Z7854 2) simila r to Mitoch

[illegible]

173468	ATU035 408	ATL8C3 6892:1 376..1 70	nap										g37460 69	33	1278	6.5e- 133	(AC005 311) putati ve revers e transc riptas e [Arabi dopsis thalia nal]	pseudo tuberc ulosis]
173469	ATU035 409	ATL8S1 6534:4 11..1	nap										g11976 60	33	370	5.5e- 34	(U4685 9) Rosa [Yersi nia entero coliti ca (type 0:8)]	
173470	ATU035 410	ATL8C3 2137:1 61..69 9	nap										g19030 34	33	669	1.2e- 61	(X9462 5) amp- bindin g protei n [Brass ica napus]	
173471	ATU035 411	ATL8C3 4856:1 156..1	nap										g22448 07	33	678	1.7e- 72	(Z9733 6) hypo	

173472	ATU035 412	ATL8S6 207:46 5..172	nap							g54133 0	33	92	et al protei n [Arabi dopsis thalia na]
173473	ATU035 413	ATL8C4 524:17 28..1	nap							g45220 05	33	1069	(AC007 069) putati ve revers e transc riptas e [Arabi dopsis thalia na]
173474	ATU035 414	ATL8S6 908:42 4..159	nap							g31830 89	33	93	NORQ PROTEI N [Parac occus denitr ifican

173479	ATU035 419	ATL8C3 5254:1 333..1 888	nap										g15243 70	33	81	0.035	(X9249 1) TOM20 [Solan um tubero sum]	transf erase [Arabi dopsis thalia nal]
173480	ATU035 420	ATL8C3 3088:1 529..4 25	nap										g46782 06	33	92	8.2e- 19	(AC007 134) putati ve polyga lactur onase [Arabi dopsis thalia nal]	
173481	ATU035 421	ATL8C4 6054:2 307..1 03	nap										g44159 15	33	158	2.0e- 10	(AC006 282) putati ve pectin methyl esterase [Arabi dopsis thalia nal]	
173482	ATU035 422	ATL8S6 220:39 8..1	nap										g22451 24	33	584		(Z9734 3) protei n	

173490	ATU035 430	ATL8C3 5824:1 645..1	nap									g45811 69	33	409	4.5e- 76	(AC006 220) putati ve revers e transc riptas e [Arabi dopsis thalia na]	etical protei n [Arabi dopsis thalia na]
173491	ATU035 431	ATL8C1 3242:1 ..1184	nap									g45811 64	33	733	4.3e- 69	(AC006 220) putati ve polypr otein [Arabi dopsis thalia na]	(AC006 220) putati ve polypr otein [Arabi dopsis thalia na]
173492	ATU035 432	ATL8C1 1866:3 77..23 41	nap									g45126 89	33	188	1.2e- 09	(AC006 931) hypoth etical protei n [Arabi dopsis thalia na]	(AC006 931) hypoth etical protei n [Arabi dopsis thalia na]

173493	ATU035 433	ATL8C4 0641:1 ..640	nap							g21911 56	33	478	9.4e- 46	(AF007 269) simila r to seed imbibi tion protei n [Arabi dopsis thalia na]
173494	ATU035 434	ATL8C1 3994:1 ..403	nap							g48368 95	33	301	2.1e- 26	(AC007 369) Hypoth etical protei n [Arabi dopsis thalia na]
173495	ATU035 435	ATL8C1 5812:1 452..1 256	nap							g30466 93	33	254	3.9e- 22	(AL022 140) recept or like protei n (fragm ent) [Arabi dopsis thalia na]
173496	ATU035 436	ATL8C4 9405:1 ..630	nap							g44327 99	33	295	5.7e- 29	(AC006 437) putati ve

173497	ATU035 437	ATL8S1 2561:1 ..483	nap										g31359 96	33	507	2.3e- 46	(AL023 589) splice some- associ ated protei n [Schiz osacch aromyc es pombel]	vsf-1 protei n [Arabi dopsis thalia na]
173498	ATU035 438	ATL8S1 3338:4 69..1	nap										g21911 56	33	261	1.2e- 26	(AF007 269) simila r to seed imbibi tion protei n [Arabi dopsis thalia na]	vsf-1 protei n [Arabi dopsis thalia na]
173499	ATU035 439	ATL8C1 050:13 35..1	nap										g31352 56	33	442	8.4e- 48	(AC003 058) hypoth etical protei n [Arabi	vsf-1 protei n [Arabi dopsis thalia na]

173500	ATU035 440	ATL8C3 6322:4 66..13 49	nap								g43758 33	33	746	3.0e- 82	dopsis thalia nal (AL021 713) recept or serine /threo nine kinase -like protei n [Arabi dopsis thalia nal]
173501	ATU035 441	ATL8C5 976:11 80..1	nap								g45393 73	33	1336		(AL049 525) putati ve retrot ranspo son polypr otein [Arabi dopsis thalia nal]
173502	ATU035 442	ATL8S1 56:245 ..1	nap								g30803 58	33	143	1.2e- 10	(AL022 580) hypoth etical protei n [Arabi dopsis thalia nal]

173507	ATU035 447	ATL8S1 054:33 8..1	nap									g28084 38	33	326	5.6e- 30	(X7969 4) bg4 [Arabi dopsis thalia na]	syntax in [Arabi dopsis thalia na]
173508	ATU035 448	ATL8S1 9669:1 75..33 9	nap									g43357 46	33	105	0.97	(AC006 284) hypoht etical protei n [Arabi dopsis thalia na]	(AC006 284) hypoht etical protei n [Arabi dopsis thalia na]
173509	ATU035 449	ATL8S2 4153:5 69..23 3	nap									g28299 13	33	319	1.6e- 24	(AC002 291) putati ve carbox yphosp honoen olpyru vate mutase [Arabi dopsis thalia na]	(AC002 291) putati ve carbox yphosp honoen olpyru vate mutase [Arabi dopsis thalia na]
173510	ATU035 450	ATL8C4 7637:1 ..852	nap									g41153 74	33	601	5.1e- 46	(AC005 967) hypoht etical	(AC005 967) hypoht etical

173511	ATU035 451	ATL8C4 1418:9 69..1	nap										g13634 92	33	789	2.1e- 75	protein [Arabi dopsis thalia nal]
173512	ATU035 452	ATL8S2 8668:1 ..295	nap										g45859 99	33	103	9.0e- 05	(AC005 287) Hypoth etical protein [Arabi dopsis thalia nal]
173513	ATU035 453	ATL8S2 8639:5 14..10 4	nap										g11734 27	33	136	5.6e- 09	D-3- PHOSPH OGLYCE RATE DEHYDR OGENAS E (PGDH) [Haemo

173514	ATU035 454	ATL8S2 4953:4 06..19 8	nap									g48862 86	33	194	8.8e- 17	philus influe nzae Rd] (AL050 300) putati ve protei n [Arabi dopsis thalia na]
173515	ATU035 455	ATL8C1 1607:4 85..1	nap									g45389 60	33	769	9.5e- 77	(AL049 488) potass ium uptake transp orter- like protei n [Arabi dopsis thalia na]
173516	ATU035 456	ATL8C4 5357:1 148..8 64	nap									g35823 20	33	256	2.2e- 30	(AC005 496) hypoth etical protei n [Arabi dopsis thalia na]
173517	ATU035 457	ATL8C4 3332:1	nap									g39804 03	33	275		(AC004 561)

173524	ATU035 464	ATL8C3 3677:3 74..31 88	nap									g45899 53	33	714	1.6e- 60	[Esche richia coli] (AC007 169) hypoth etical protei n [Arabi dopsis thalia nal (X9357 5) NADH dehydr ogenas e subuni t II [Solan um tubero sum]
173525	ATU035 465	ATL8S1 5837:6 4..354	nap									g33348 58	33	82	1.6e- 06	CHLORO PLAST 50S RIBOSO MAL PROTEI N L2 [Sinap is alba]
173526	ATU035 466	ATL8S2 6320:4 14..14 3	nap									g13286 3	33	224		(AC005 679) Strong simila rity
173527	ATU035 467	ATL8C3 9489:1 89..1	nap									g38343 13	33	118	1.8e- 09	

173528	ATU035 468	ATL8C4 3288:1 ..287	nap						1.00		g43097 03	32	126	0.016	(AC006 266) putati ve transp oson protei n [Arabi dopsis thalia na]	to T16B12 .3 [Arabi dopsis thalia na]
173529	ATU035 469	ATL8C8 575:1. .659	nap								g55307 3	33	591	2.7e- 62	(M9448 1) revers e transc riptas e [Zea mays]	1) revers e transc riptas e [Zea mays]
173530	ATU035 470	ATL8C2 6536:9 65..1	nap								g45570 78	33	972	9.3e- 98	(AC007 045) putati ve Tall-1 pol polypr oteins, 5, partia l [Arabi	(AC007 045) putati ve Tall-1 pol polypr oteins, 5, partia l [Arabi

173531	ATU035 471	ATL8S1 9241:1 ..237	nap										g42637 05	33	127	7.8e- 10	dopsis thalia nal (AC006 223) putati ve diseas e resist ance protei n [Arabi dopsis thalia nal]
173532	ATU035 472	ATL8S2 372:30 7..526	nap										g31842 87	33	106	0.012	(AC004 136) revers e- transc riptas e-like protei n [Arabi dopsis thalia nal]
173533	ATU035 473	ATL8C5 322:1. ..180	nap										g45860 52	33	89	5.2e- 37	(AC007 020) unknow n protei n [Arabi dopsis thalia nal]

173534	ATU035 474	ATL8C1 9354:1 ..943	nap							g24941 26	33	1362	3.8e- 130	(AC002 376) Contai ns simila rity to Chlamy dia outer membra ne protei n (gb X5 3512). [Arabi dopsis thalia na]
173535	ATU035 475	ATL8C4 1461:6 94..1	nap							g45389 66	33	864	1.8e- 78	(Al049 488) putati ve protei n [Arabi dopsis thalia na]
173536	ATU035 476	ATL8C2 7365:3 04..1	nap							g42630 48	33	277		(AC005 142) putati ve hydrol ase [Arabi dopsis thalia na]

173537	ATU035 477	ATL8C3 5198:9 18..1	nap									g44328 50	33	331	1.1e- 39	(AC006 300) hypoth etical protei n [Arabi dopsis thalia na]
173538	ATU035 478	ATL8C2 1687:1 120..1 570	nap									g42635 46	33	69	0.0003 5	(AC006 250) putati ve Athila retroo lement ORF1 protei n [Arabi dopsis thalia na]
173539	ATU035 479	ATL8C1 9431:1 ..739	nap									g48503 84	33	268	2.5e- 27	(AC007 357) F3F19. 3 [Arabi dopsis thalia na]
173540	ATU035 480	ATL8C4 0354:1 ..360	nap									g44163 03	33	431	1.6e- 31	(AF105 716) gag protei n [Zea mays]
173541	ATU035	ATL8S1	nap									g41153	33	104	9.3e-	(AC005

481	905:1. .292								79				07	967) putati ve carbon yl reduct ase [Arabi dopsis thalia na]
173542	ATU035 482	ATL8C9 84:127 6..1	nap						g23426 84	33	381	2.0e- 38	(AC000 106) F7G19. 14 [Arabi dopsis thalia na]	
173543	ATU035 483	ATL8C1 7003:1 7..443	nap						g44172 77	33	591	6.7e- 52	(AC007 019) hypoth etical protei n [Arabi dopsis thalia na]	
173544	ATU035 484	ATL8S2 051:60 9..1	nap						g40164 9	33	215	3.8e- 18	HYPOTH ETICAL 44.7 KD PROTEI N IN LPD-3 5'REGI ON (ORF3) [Pseud	

173545	ATU035 485	ATL8C3 4853:6 91..14	nap										g32362 53	33	899	2.9e- 91	omónas putida] (AC004 684) recept or- like protei n kinase [Arabi dopsis thalia na]
173546	ATU035 486	ATL8S7 086:1. .456	nap										g28322 44	33	487	3.8e- 22	(AF031 569) hypoth etical protei n [Zea mays]
173547	ATU035 487	ATL8S9 265:53 4..242	nap										g16524 34	33	233	5.1e- 22	(D9090 5) N- acetyl glutam ate kinase [Synec hocyst is sp.]
173548	ATU035 488	ATL8S2 5577:4 57..1	nap										g35503 32	33	462	1.4e- 38	(AF084 032) quinol oxidas e subuni t I

173549	ATU035 489	ATL8C1 8769:3 45..1	nap									g41851 44	33	218	8.1e- 21	QxtA [Rhodo bacter sphaer oides] (AC005 724) unknow n protei n [Arabi dopsis thalia na]
173550	ATU035 490	ATL8C2 1190:8 687..8 102	nap									g43097 02	33	815	3.3e- 81	(AC006 266) putati ve transp oson protei n [Arabi dopsis thalia na]
173551	ATU035 491	ATL8S1 2174:1 ..519	nap								ATL8S1 2174:8 6..495	0.99	32	229	2.4e- 23	(AE000 764) serine protea se [Aquif ex aeolic us]
173552	ATU035 492	ATL8S1 3279:1 ..463	nap								ATL8S1 3279:1 7..463	0.99	32	71	2.6e- 07	PUTATI VE ALPHA- L-

173553	ATU035 493	ATL8S2 1859:1 ..545	nap							ATL8S2 1859:3 25..38 4	0.99	g22135 83	32	171	3.8e- 14	FUCOSI DASE PRECUR SOR (ALPHA -L- FUCOSI DE FUCOHY DROLAS E) [Caeno rhabdi tis elegan s]
173554	ATU035 494	ATL8C7 400:36 6..118 4	nap							ATL8C7 400:63 9..802	0.99	g45394 42	32	536	6.0e- 38	(AL049 523) putati ve protei n [Arabi dopsis thalia nal]
173555	ATU035 495	ATL8C2 132:64 9..1	nap							ATL8C2 132:53 5..72	0.99	g28282 96	32	511	1.8e- 51	(AL021 687) RNase L inhibi tor [Arabi

173556	ATU035 496	ATL8C2 9192:5 63..59	nap					ATL8C2 9192:4 93..59	0.99	g42630 46	32	98	2.1e- 09	dopsis thalia na] (AC005 142) hypoth etical protei n [Arabi dopsis thalia na]
173557	ATU035 497	ATL8S3 399:23 3..655	nap					ATL8S3 399:51 9..321	0.97	g47551 89	32	492	1.6e- 38	(AC007 018) putati ve cytoch rome P450 [Arabi dopsis thalia na]
173558	ATU035 498	ATL8C9 79:801 ..1253	nap					ATL8C9 79:801 ..1098	0.97	g40564 34	32	337	2.5e- 23	(AC005 990) Simila r to OBP32p ep protei n gb U37 698 from Arabid opsis thalia na. [Arabi

173559	ATU035 499	ATL8S5 248:48 7..198	nap					ATL8S5 248:41 5..198	0.97	g48369 34	32	389	7.0e- 36	dopsis thalia na] (AC006 085) Hypoth etical protei n [Arabi dopsis thalia na]
173560	ATU035 500	ATL8S7 393:21 0..459	nap					ATL8S7 393:24 6..449	0.97	g33414 68	32	298	3.9e- 29	(AJ009 594) Dof zinc finger protei n [Nicot iana tabacu m]
173561	ATU035 501	ATL8S8 721:60 8..1	nap					ATL8S8 721:59 3..186	0.96	g26186 89	32	417	2.6e- 35	(AC002 510) unknow n protei n [Arabi dopsis thalia na]
173562	ATU035 502	ATL8C8 380:17 2..217 5	nap					ATL8C8 380:17 2..188 0	0.96	g38766 44	32	222	6.0e- 16	(Z8152 6) predic ted using GeneFi

173567	ATU035 507	ATL8C4 630:13 44..1	nap					ATL8C4 630:11 54..19 3	0.95	g29824 33	32	242	4.8e- 18	1 (DIGLY CERIDE KINASE) (DGK 1) (DAG KINASE 1) [Arabi dopsis thalia nal (AL022 224) Glu- rich protei n [Arabi dopsis thalia nal]
173568	ATU035 508	ATL8S1 0348:1 ..416	nap					ATL8S1 0348:8 8..416	0.95	g25010 53	32	424	5.1e- 39	SERYL- TRNA SYNTH E-- TASE (SERIN E-- TRNA LIGASE) (SERRS) [staph ylococ cus aureus]
173569	ATU035	ATL8C2	nap					ATL8C2	0.95	g48368	32	256	1.0e-	(AC007

509	4568:1 ..335					4568:1 09:..33 5	85				24	260) Hypoth etical protei n [Arabi dopsis thalia nal]
173570	ATU035 510	ATL8C1 343:1. .1602	nap			ATL8C1 343:67 ..458	0.95	g10665 01	32	70	7.4e- 06	(L2230 2) serine /threo nine protei n kinase [Arabi dopsis thalia nal]
173571	ATU035 511	ATL8S2 2221:1 ..607	nap			ATL8S2 2221:1 45:..32 4	0.95	g38853 28	32	375	3.1e- 35	(AC005 623) putati ve serine /threo nine protei n kinase [Arabi dopsis thalia nal]
173572	ATU035 512	ATL8C1 5308:5 044:..3 780	nap			ATL8C1 5308:4 616:..3 780	0.95	g30932 94	32	652	1.3e- 23	(Y1278 2) putati ve villin

173573	ATU035 513	ATL8S2 7647:1 ..398	nap				ATL8S2 7647:4 7..249	0.95	g31842 74	32	587	8.0e- 57	[Arabi dopsis thalia na] (AC004 136) hypoth etical protei n [Arabi dopsis thalia na]
173574	ATU035 514	ATL8C8 82:114 4..980	nap				ATL8C8 82:110 8..980	0.94	g22889 81	32	118	1.5e- 09	(AC002 335) calciu m bindin g protei n isolog [Arabi dopsis thalia na]
173575	ATU035 515	ATL8S1 5131:1 ..536	nap				ATL8S1 5131:1 11..53 6	0.94	g11512 3	32	484	1.1e- 30	HIGH- AFFINI TY BRANCH ED- CHAIN AMINO ACID TRANSP ORT PROTEI N BRAE [Pseud

Year	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	

173576	ATU035 516	ATL8C4 3925:1 ..795	nap					ATL8C4 3925:1 27..79 5	0.94	g34618 42	32	632			omonas aerugi nosa] (AC005 315) putati ve recept or protei n kinase [Arabi dopsis thalia na]
173577	ATU035 517	ATL8S2 5560:4 13..37	nap					ATL8S2 5560:3 21..37	0.94	g29838 32	32	130	6.1e- 10		(AE000 740) 5,10- methyl enetet rahydr ofolat e reduct ase [Aquif ex aeolic us]
173578	ATU035 518	ATL8S5 364:1. .602	nap					ATL8S5 364:63 ..571	0.93	g17698 98	32	565	4.4e- 54		(Y0801 0) lectin recept or kinase [Arabi dopsis thalia na]

173579	ATU035 519	ATL8C3 4536:1 12..10 39	nap				ATL8C3 4536:1 12..61 1	0.93	g32928 26	32	576	8.1e- 34	(AL031 018) hypoth etical protei n [Arabi dopsis thalia nal]
173580	ATU035 520	ATL8C4 6505:7 95..1	nap				ATL8C4 6505:3 92..20 1	0.93	g44552 99	32	270	4.1e- 24	(AL035 528) putati ve protei n [Arabi dopsis thalia nal]
173581	ATU035 521	ATL8C1 2949:1 ..769	nap				ATL8C1 2949:7 4..575	0.93	g26452 29	32	94	4.1e- 07	(U7859 7) kinesi n light chain [Plect onema boryan um]
173582	ATU035 522	ATL8C4 6786:1 971..1	nap				ATL8C4 6786:1 971..1 42	0.93	g29959 60	32	358	4.6e- 25	(AF053 733) recomb inant kinesi n heavy chain [Expre ssion]

173583	ATU035 523	ATL8S1 5776:4 84..1	nap					ATL8S1 5776:4 84..23 6	0.93		g45875 62	32	211	3.3e- 11	vector ppK113] (AC006 550) Belong s to PF1005 83 Acetyl transf erase (GNAT) family [Arabi dopsis thalia na]
173584	ATU035 524	ATL8C4 0525:7 24..13 82	nap					ATL8C4 0525:7 24..13 82	0.93		g29613 83	32	232	1.0e- 22	(AL022 141) putati ve protei n [Arabi dopsis thalia na]
173585	ATU035 525	ATL8S1 1990:3 89..53 2	nap					ATL8S1 1990:3 95..53 2	0.92		g36500 30	32	122	1.2e- 10	(AC005 396) unknow n protei n [Arabi dopsis thalia na]
173586	ATU035	ATL8C5	nap					ATL8C5	0.92		g45860	32	731	1.6e-	(AC007

173587	526	529:67 0..1				529:60 6..66	29	63	109) putati ve protei n kinase [Arabi dopsis thalia na]
	ATU035 527	ATL8S2 923:1. .425	nap			ATL8S2 923:74 ..406	945395 79	372	32
							0.92	3.3e- 37	(AL035 636) putati ve secret ed protei n [Strep tomyce s coelic olor]
173588	ATU035 528	ATL8S1 1896:1 ..422	nap			ATL8S1 1896:1 ..422	924634 58	92	0.0015
									(AJ001 830) 4- Hydrox ybenzo yl-CoA reduct ase gamma- subuni t [Thaue ra aromat ica]
173589	ATU035 529	ATL8C3 4044:1	nap			ATL8C3 4044:3	943888 25	665	32
							0.91	9.0e- 66	(AC006 528)

173590	ATU035 530	..773	nap				6..572	0.91	g49143 61	32	1335	2.2e- 114	putati ve pol ypr otei n with revers e transc riptas e domain (Pfam: PF0007 8) [Arabi dopsis thalia na]
		ATL8C1 167:1. .1258	nap				ATL8C1 167:11 2..120 7						(AC007 289) putati ve revers e transc riptas e [Arabi dopsis thalia na]
173591	ATU035 531	ATL8C2 0429:1 ..1254	nap				ATL8C2 0429:1 24..12 54	0.90	g45875 24	32	931	3.8e- 103	(AC007 060) T5I8.1 3 [Arabi dopsis thalia na]
173592	ATU035	ATL8C1	nap				ATL8C1	0.90	g45593	32	402	2.0e-	(AC007

532	8990:1 ..749				8990:7 3..736		33		34	087) unknow n protei n [Arabi dopsis thalia na]
173593	ATU035 533	ATL8C5 61:249 4..191	nap		ATL8C5 61:233 3..149 2	0.90	g42638 31	1764	4.1e- 176	(AC006 067) putati ve revers e transc riptas e [Arabi dopsis thalia na]
173594	ATU035 534	ATL8C4 301:1. .1740	nap		ATL8C4 301:65 ..1672	0.90	g46783 06	1299	5.1e- 106	(AL049 655) kinesi n-like protei n [Arabi dopsis thalia na]
173595	ATU035 535	ATL8C3 7255:5 04..20	nap		ATL8C3 7255:5 04..20	0.89	g42042 77	157		(AC004 146) Hypoth etical protei n [Arabi dopsis

173596	ATU035 536	ATL8C4 9687:9 42..50 6	nap				ATL8C4 9687:8 42..71 0	0.89	g22450 03	32	711	1.2e- 69	thalia na] (Z9734 1) simila rity to a membra ne- associ ated salt- induci ble protei n - Nicoti ana tabacu m [Arabi dopsis thalia na]
173597	ATU035 537	ATL8S1 8205:1 ..497	nap				ATL8S1 8205:7 5..286	0.89	g28800 43	32	320	2.4e- 27	(AC002 340) putati ve 3- hydrox yisobu tyryl- coenzy me A hydrol ase [Arabi dopsis thalia na]
173598	ATU035	ATL8C4	nap				ATL8C4	0.89	g48504	32	237		(AC007

538	3431:1 042..2 253				3431:1 051..2 253	12					288) putati ve MuDR MURA transp osase [Arabi dopsis thalia nal]
173599	ATU035 539	ATL8C3 5288:5 51..14	nap		ATL8C3 5288:5 44..14	0.88	g11418 4	32	291	2.7e- 22	CHORIS MATE SYNTA SE (5- ENOLPY RUVYLS HIKIMA TE-3- PHOSPH ATE PHOSPH OLYASE) [Salmo nella typhim urium]
173600	ATU035 540	ATL8C2 5834:4 59..1	nap		ATL8C2 5834:3 81..48	0.88	g22621 64	32	732	5.5e- 72	(AC002 329) putati ve obtus foliol 14- alpha demeth ylase [Arabi dopsis

173605	ATU035 545	ATL8C3 9739:1 ..508	nap					ATL8C3 9739:8 7..508	0.87	g28326 41	32	352	2.6e- 39	protein [Arabi dopsis thalia nal]
173606	ATU035 546	ATL8C2 864:12 50..70 6	nap					ATL8C2 864:12 03..70 6	0.87	g38343 07	32	610	2.5e- 58	(AL021 710) glycol ate oxidas e- like protei n [Arabi dopsis thalia nal]
173607	ATU035 547	ATL8C3 6991:1 394..1	nap					ATL8C3 6991:1 394..6 1	0.87	g27022 84	32	1284	8.9e- 86	(AC003 033) Argona ute (AG01) -like protei n

173608	ATU035 548	ATL8C6 275:12 11..1	nap						ATL8C6 275:10 40..63	0.87	g33602 89	32	106	0.093	[Arabi dopsis thalia na] (AF023 164) leucin e-rich repeat transm embran e protei n kinase 1 [Zea mays]
173609	ATU035 549	ATL8S2 385:12 9..572	nap						ATL8S2 385:12 9..509	0.86	g39415 24	32	355	8.2e- 36	(AF062 916) putati ve transc riptio n factor [Arabi dopsis thalia na]
173610	ATU035 550	ATL8S1 022:60 2..115	nap						ATL8S1 022:44 0..229	0.86	g44067 94	32	584	2.9e- 26	(AC006 304) hypoth etical protei n [Arabi dopsis thalia na]

173611	ATU035 551	ATL8C3 5128:2 98..10 44	nap				ATL8C3 5128:2 98..10 44	0.86	g37383 32	32	671	6.4e- 66	(AC005 170) putati ve eukary otic initia tion factor [Arabi dopsis thalia nal]
173612	ATU035 552	ATL8C8 272:47 6..1	nap				ATL8C8 272:47 6..90	0.85	g45845 34	32	629	5.0e- 51	(AL049 608) cytoch rome p450- like protei n [Arabi dopsis thalia nal]
173613	ATU035 553	ATL8C2 6432:4 72..91 3	nap				ATL8C2 6432:4 72..69 6	0.85	g15183 88	32	355	4.2e- 12	(X9117 2) korean - radish isoper oxidas e [Rapha nus sativu s]
173614	ATU035 554	ATL8C1 8721:2 624..3	nap				ATL8C1 8721:2 820..3	0.85	g22528 60	32	212	6.7e- 12	(AF013 294) No

173615	ATU035 555	ATL8C8 702:1. .1258	nap				119	ATL8C8 702:20 8..120 1	0.85	g42063 06	32	1886	1.7e- 100	(AF049 110) prpol [Zea mays]
173616	ATU035 556	ATL8C2 5134:1 908..1	nap					ATL8C2 5134:1 619..9 5	0.84	g44552 79	32	1351	2.8e- 100	(AL035 527) DNA- direct ed RNA polyme rase (EC 2.7.7. 6) II second larges t chain [Arabi dopsis thalia na]
173617	ATU035 557	ATL8S2 5113:5 01..74	nap					ATL8S2 5113:4 50..75	0.84	g19383 79	32	370	1.5e- 34	(U9318 0) Flil [Caulo bacter cresce ntus]
173618	ATU035 558	ATL8C4 073:40	nap					ATL8C4 073:40	0.84	g41153 65	32	1560	2.4e- 160	(AC005 957)

Genotype	Age	Sex	Weight (g)	Length (mm)	Survival (%)	Survival (days)	Survival (weeks)	Survival (months)	Survival (years)
Control	10	♂	100	100	100	100	100	100	100
Control	10	♀	100	100	100	100	100	100	100
Control	20	♂	200	200	100	100	100	100	100
Control	20	♀	200	200	100	100	100	100	100
Control	30	♂	300	300	100	100	100	100	100
Control	30	♀	300	300	100	100	100	100	100
Control	40	♂	400	400	100	100	100	100	100
Control	40	♀	400	400	100	100	100	100	100
Control	50	♂	500	500	100	100	100	100	100
Control	50	♀	500	500	100	100	100	100	100
Control	60	♂	600	600	100	100	100	100	100
Control	60	♀	600	600	100	100	100	100	100
Control	70	♂	700	700	100	100	100	100	100
Control	70	♀	700	700	100	100	100	100	100
Control	80	♂	800	800	100	100	100	100	100
Control	80	♀	800	800	100	100	100	100	100
Control	90	♂	900	900	100	100	100	100	100
Control	90	♀	900	900	100	100	100	100	100
Control	100	♂	1000	1000	100	100	100	100	100
Control	100	♀	1000	1000	100	100	100	100	100
Control	110	♂	1100	1100	100	100	100	100	100
Control	110	♀	1100	1100	100	100	100	100	100
Control	120	♂	1200	1200	100	100	100	100	100
Control	120	♀	1200	1200	100	100	100	100	100
Control	130	♂	1300	1300	100	100	100	100	100
Control	130	♀	1300	1300	100	100	100	100	100
Control	140	♂	1400	1400	100	100	100	100	100
Control	140	♀	1400	1400	100	100	100	100	100
Control	150	♂	1500	1500	100	100	100	100	100
Control	150	♀	1500	1500	100	100	100	100	100
Control	160	♂	1600	1600	100	100	100	100	100
Control	160	♀	1600	1600	100	100	100	100	100
Control	170	♂	1700	1700	100	100	100	100	100
Control	170	♀	1700	1700	100	100	100	100	100
Control	180	♂	1800	1800	100	100	100	100	100
Control	180	♀	1800	1800	100	100	100	100	100
Control	190	♂	1900	1900	100	100	100	100	100
Control	190	♀	1900	1900	100	100	100	100	100
Control	200	♂	2000	2000	100	100	100	100	100
Control	200	♀	2000	2000	100	100	100	100	100
Control	210	♂	2100	2100	100	100	100	100	100
Control	210	♀	2100	2100	100	100	100	100	100
Control	220	♂							

173619	ATU035 559	16..67 52	nap				16..67 27	0.84	g29613 50	32	490	3.2e- 42	(AL022 140) aspartic proteinase like protein [Arabis dopsis thaliana]
173620	ATU035 560	16..67 52	nap				ATL8C3 1234:6 65..1	0.83	g40068 68	32	719	1.0e- 68	(Z9970 7) putative protein [Arabis dopsis thaliana]
173621	ATU035 561	16..67 52	nap				ATL8C2 5593:6 16..89 3	0.83	g46626 39	32	614	3.5e- 66	(AC007 233) putative permease

173622	ATU035 562	ATL8C1 0157:1 ..2667	nap					ATL8C1 0157:6 3..247 6	0.83	g10793 93	32	453		[Arabi dopsis thalia na]
173623	ATU035 563	ATL8S4 107:67 1..160	nap					ATL8S4 107:67 1..164	0.83	g22448 88	32	440	1.8e- 44	(Z9733 8) simila rity to cytoch rome P45Q [Arabi dopsis thalia na]
173624	ATU035 564	ATL8C1 4925:1 ..1378	nap					ATL8C1 4925:1 103..7 63	0.83	g39804 11	32	1268	3.5e- 30	(AC004 561) putati ve prolin e-rich protei n [Arabi dopsis thalia na]
173625	ATU035 565	ATL8C4 3774:3 96..1	nap					ATL8C4 3774:3 96..16	0.83	g38057 61	32	523		(AC005 693) unknow

173626	ATU035 566	ATL8C4 3713:6 07..35 3	nap						3	ATL8C4 3713:6 07..35 3	0.83	g17299 80	32	203	n protei n [Arabi dopsis thalia na]
173627	ATU035 567	ATL8C1 423:40 30..11 38	nap							ATL8C1 423:36 97..35 14	0.82	g42635 43	32	683	(AC006 250) putati ve Athila retroee lement ORF1 protei n [Arabi dopsis thalia na]
173628	ATU035 568	ATL8C3 53:1.. 1023	nap							ATL8C3 53:71.. .1000	0.82	g34618 41	32	590	(AC005 315) putati ve recept or protei n

173629	ATU035 569	ATL8C3 9467:7 00..1	nap					ATL8C3 9467:6 23...49 9	0.82	g30045 63	32	369	5.2e- 35	kinase [Arabi dopsis thalia na] (AC003 673) simila r to APG (non prolin e-rich region) [Arabi dopsis thalia na]
173630	ATU035 570	ATL8C3 6106:1 518..1	nap					ATL8C3 6106:1 518..1 61	0.82	g11494 4	32	314	1.0e- 28	BETA- GALACT OSIDAS E PRECUR SOR (LACTA SE) (ACID BETA- GALACT OSIDAS E) [Mus muscul us]
173631	ATU035 571	ATL8C5 1:1..6 92	nap					ATL8C5 1:93.. 510	0.81	g45586 86	32	850	7.1e- 76	(AC006 586) putati ve TNP2

173632	ATU035 572	ATL8C3 7480:1 897..1	nap					ATL8C3 7480:1 133..2 83	0.81	g31526 13	32	167		protein of the Taml transp oson of Antirr hinum majus [Arabi dopsis thalia na]
173633	ATU035 573	ATL8S3 0698:5 01..16 7	nap					ATL8S3 0698:4 34..24 5	0.81	g32490 75	32	546	1.2e- 53	(AC004 473) Contai ns simila rity to no- apical - merist em (NAM) protei n gb X92 205

173634	ATU035 574	ATL8C4 9949:1 976..6 6	nap					ATL8C4 9949:1 976..6 6	0.81	g42638 31	32	1847	6.5e- 172	from Petuni a hybrid a. [Arabi dopsis thalia na]
173635	ATU035 575	ATL8C7 111:14 35..1	nap					ATL8C7 111:12 47..75 5	0.81	g48357 85	32	1311	1.5e- 141	(AC006 067) putati ve revers e transc riptas e [Arabi dopsis thalia na]
														(AC007 296) Strong simila rity to gbIX95 759 solubl e- starch - syntha se precur sor (SSIII) from

173636	ATU035 576	ATL8C3 5910:1 577..9 85	nap					ATL8C3 5910:1 418..9 85	0.81	g41917 85	32	231	2.1e- 10	Solanu m tubero sum. [Arabi dopsis thalia na]
173637	ATU035 577	ATL8C4 752:94 2..37	nap					ATL8C4 752:85 4..40	0.81	g18144 24	32	180	7.7e- 14	(U8525 4) homeod omain protei n AHDP [Arabi dopsis thalia na]
173638	ATU035 578	ATL8S2 4709:5 58..1	nap					ATL8S2 4709:4 31..23 7	0.81	g41853 10	32	588	4.9e- 34	(AF090 446) gag protei n [Zea mays]
173639	ATU035 579	ATL8C4 1559:1 ..685	nap					ATL8C4 1559:9 2..532	0.80	g11098 73	32	216	2.6e- 21	(U4154 2) Simila r to protei

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disulfide isomerase; coded for by C. elegant s cDNA CEESB65F; coded for by C. elegant s cDNA CEESH23FB; coded for by C. elegant s cDNA CEESH23FC; coded for by C. elegant s cDNA CEESN70F; coded for by C. elegant s cDNA CEESO.
.. []

173640	ATU035 580	ATL8C3 243:20 41..13 5	nap				ATL8C3 243:20 41..13 5	0.80	g42636 43	32	226	2.6e- 25	(AC006 136) hypoth etical protei n [Arabi dopsis thalia na]
173641	ATU035 581	ATL8C1 4641:1 136..9 1	nap				ATL8C1 4641:1 109..9 5	0.80	g27022 76	32	832	3.6e- 96	(AC003 033) putati ve beta- glucos idase [Arabi dopsis thalia na]
173642	ATU035 582	ATL8S2 9340:4 97..1	nap				ATL8S2 9340:4 97..10 2	0.80	g44067 94	32	564	2.7e- 41	(AC006 304) hypoth etical protei n [Arabi dopsis thalia na]
173643	ATU035 583	ATL8C3 4117:1 789..2 35	nap				ATL8C3 4117:1 703..6 62	0.80	g33675 37	32	911	3.0e- 63	(AC004 392) Contai ns simila rity to ANK repeat region

173645	ATU035 585	ATL8C1 5474:1 606..3 103	nap						0.79	g19463 61	32	158	4.9e- 07	T28M21 .14 from A. thalia na BAC gb AF0 02109. [Arabi dopsis thalia na]
173646	ATU035 586	ATL8S1 7899:3 53..1	nap						0.79	g21261 39	32	173	1.7e- 12	cpsF protei n, 40,6K - Proteu s mirabi lis [Prote us mirabi lis]
173647	ATU035 587	ATL8C4 3580:1 ..484	nap						0.79	g47551 99	32	150	(AC007 018) hypoth	

173648	ATU035 588	ATL8C2 1832:1 295..2 682	nap							4	ATL8C2 1832:1 295..2 669	0.79	g44327 94	32	650	1.6e- 60	etical protei n [Arabi dopsis thalia na]
173649	ATU035 589	ATL8C2 6131:6 57..1	nap								ATL8C2 6131:4 80..10 4	0.79	g29470 60	32	388	1.4e- 42	(AC002 521) putati ve membra ne protei n [Arabi dopsis thalia na]
173650	ATU035 590	ATL8S2 9833:4 92..1	nap								ATL8S2 9833:4 92..57	0.78	g41732 8	32	261	1.4e- 23	UDP-N- ACETYL MURAMO YLALAN YL-D- GLUTAM ATE--

173651	ATU035 591	ATL8S1 1428:5 05..1	nap							ATL8S1 1428:4 92..1	0.77	g46995 31	32	200	8.0e- 20	2,6- DIAMIN OPIMEL ATE LIGASE (UDP- N- ACETYL MURAMY L- TRIPPEP TIDE SYNTH E) [Bacil lus subtil is]
173652	ATU035 592	ATL8C1 3585:1 482..1	nap							ATL8C1 3585:1 384..2 8	0.77	g35229 43	32	1290	6.0e- 122	(AC004 411) putati ve p- glycop rotein [Arabi dopsis thalia na]
173653	ATU035 593	ATL8C4 0526:1 108..1 23	nap							ATL8C4 0526:1 051..1 23	0.77	g29977 33	32	50	2.7e- 05	(AF054 513) lipase [Therm omyces

173654	ATU035 594	ATL8C2 0966:1 ..2245	nap				ATL8C2 0966:2 27..20 85	0.77		g44553 67	32	913	2.5e- 67	lanugi nosus] (AL035 524) putati ve protei n [Arabi dopsis thalia na]
173655	ATU035 595	ATL8S2 0275:5 08..42	nap				ATL8S2 0275:3 88..42	0.76		g21046 18	32	177	1.3e- 09	(Z9539 8) unknow n [Mycob acteri um leprae]
173656	ATU035 596	ATL8C4 5528:6 56..1	nap				ATL8C4 5528:5 82..20 3	0.76		g32928 24	32	803	1.0e- 57	(AL031 018) putati ve protei n [Arabi dopsis thalia na]
173657	ATU035 597	ATL8C2 2518:1 359..1	nap				ATL8C2 2518:1 284..1 26	0.76		g26606 74	32	1197	1.3e- 118	(AC002 342) hypoth etical protei n [Arabi dopsis thalia na]

173658	ATU035 598	ATL8C2 9877:1 ..879	nap				ATL8C2 9877:1 58..85 1	0.76	g40068 68	32	305	2.6e- 21	na] (Z9970 7) putati ve protei n [Arabi dopsis thalia na]
173659	ATU035 599	ATL8C2 111:14 45..1	nap				ATL8C2 111:12 01..81 7	0.76	g33778 34	32	831	3.4e- 58	(AF075 598) No defini tion line found [Arabi dopsis thalia na]
173660	ATU035 600	ATL8C3 7358:8 44..17 2	nap				ATL8C3 7358:7 23..19 5	0.76	g24627 48	32	434		(AC002 292) putati ve Clathr in Coat Assemb ly protei n [Arabi dopsis thalia na]
173661	ATU035 601	ATL8C3 6578:7 86..51	nap				ATL8C3 6578:2 90..18	0.75	g37765 72	32	122	4.6e- 13	(AC005 388) ESTs

173662	ATU035 602	ATL8C1 2941:1 06..79 7	nap						7	0.75	g13042 27	32	213	6.0e- 23	gb R65 052, gb AA7 12146, gb H76 533, gb H76 282, gb AA6 50771, gb H76 287, gb AA6 50887, gb N37 383, gb Z29 721 and gb Z29 722 come from this gene. [Arabi dopsis thalia na]
173663	ATU035 603	ATL8C2 9650:1	nap							0.75	g44163 02	32	1545	5.3e- 157	(D6378 1) Epoxid e hydrol ase [Glyci ne max] (AF105 716)

173664	ATU035 604	..1028	nap				49..93 7	0.74	g42638 30	32	764		copia- type pol polypr oteins [Zea mays] (AC006 067) hypoth etical protei n [Arabi dopsis thalia na]
173665	ATU035 605	ATL8C4 3298:6 50..1	nap				ATL8C4 3298:6 08..36 1	0.74	g58515 9	32	571	9.9e- 45.	CELL DIVISI ON PROTEI N FTSH HOMOLO G [Bacil lus subtil is]
173666	ATU035 606	ATL8C8 759:17 81..27 6	nap				ATL8C8 759:10 43..27 6	0.74	g22448 94	32	997	2.0e- 110	(Z9733 8) simila rity to cycloa rtenol syntha se [Arabi dopsis thalia

173667	ATU035 607	ATL8C2 0779:1 ..700	nap				ATL8C2 0779:3 33..70 0	0.73	g47551 92	32	444	3.8e- 36	na] (AC007 018) hypoth etical protei n [Arabi dopsis thalia na]
173668	ATU035 608	ATL8S1 1434:5 84..40	nap				ATL8S1 1434:5 78..10 1	0.73	g21291 39	32	136	6.6e- 08	N- methyl hydant oinase (ATP- hydrol yzing) (EC 3.5.2. 14) - Methan ococcu s jannas chii [Metha nococc us jannas chii]
173669	ATU035 609	ATL8C3 9306:1 193..1 791	nap				ATL8C3 9306:1 193..1 746	0.73	g99758	32	397	1.5e- 37	monosa cchari d transp ort protei n STP4 - Arabid

173670	ATU035 610	ATL8C5 0108:1 16..18 28	nap					ATL8C5 0108:1 16..18 17	0.73	g22135 98	32	1621	4.6e- 169	opsis thalia na [Arabi dopsis thalia na]
173671	ATU035 611	ATL8S2 9053:1 ..541	nap					ATL8S2 9053:8 ..458	0.73	g14493 78	32	469	1.2e- 46	(Z7716 5) choD [Mycob acteri um tuberc ulosis]
173672	ATU035 612	ATL8C8 725:10 05..1	nap					ATL8C8 725:80 4..46	0.72	g22450 47	32	1313	1.3e- 123	(Z9734 2) resist ance gene [Arabi dopsis thalia na]
173673	ATU035 613	ATL8C4 0090:1 697..1	nap					ATL8C4 0090:1 509..1 42	0.72	g45804 62	32	239	4.1e- 18	(AC006 081) hypoth etical protei n [Arabi

173674	ATU035 614	ATL8C9 891:98 3..77	nap					ATL8C9 891:48 3..143	0.72	g40380 62	32	499	3.4e- 47	dopsis thalia nal (AC005 897) putati ve transp oson MuDR [Arabi dopsis thalia nal
173675	ATU035 615	ATL8C4 0787:7 17..1	nap					ATL8C4 0787:6 69..27 7	0.71	g48951 68	32	238	2.9e- 15	(AC007 662) putati ve replac ation protei n Al [Arabi dopsis thalia nal
173676	ATU035 616	ATL8C1 0098:2 406..1	nap					ATL8C1 0098:1 942..3 9	0.71	g21045 30	32	93		(AF001 308) PROLIF ERA [Arabi dopsis thalia nal
173677	ATU035 617	ATL8C4 2519:5 35..86	nap					ATL8C4 2519:4 90..86	0.70	g44328 01	32	374	1.1e- 34	(AC006 437) unknow n protei n

173678	ATU035 618	ATL8S1 6763:4 72..1	nap					ATL8S1 6763:4 69..13	0.70	g45389 12	32	560	7.4e- 57	[Arabi dopsis thalia na] (AL049 482) putati ve protei n [Arabi dopsis thalia na]
173679	ATU035 619	ATL8C1 7195:1 ..2990	nap					ATL8C1 7195:1 06..29 90	0.70	g29824 40, g29824 38	32, 31	276, 289	1.2e- 21, 2.6e- 20	(AL022 224) terpen e cyclas e like protei n [Arabi dopsis thalia na]; (AL022 224) cadine ne syntha se like protei n [Arabi dopsis thalia na]
173680	ATU035	ATL8S6	nap					ATL8S6	0.70	g44327	32	290		(AC006

173684	ATU035 624	ATL8C4 2649:5 29..17 09	nap					ATL8C4 2649:6 07..15 31	0.69	g24594 15	32	354	2.0e- 48	(AC002 332) hypoth etical protein [Arabi dopsis thalia na]
173685	ATU035 625	ATL8C2 0844:1 ..890	nap					ATL8C2 0844:4 54..85 6	0.69	g44172 78	32	731	1.3e- 75	(AC007 019) hypoth etical protein [Arabi dopsis thalia na]
173686	ATU035 626	ATL8C2 9211:4 99..1	nap					ATL8C2 9211:4 04..32 6	0.68	g45859 77	32	97	5.0e- 12	(AC005 287) Unknown protein [Arabi dopsis thalia na]
173687	ATU035 627	ATL8C2 3975:1 ..772	nap					ATL8C2 3975:6 6..655	0.67	g30753 91	32	752	3.0e- 80	(AC004 484) unknown protein [Arabi dopsis thalia na]

173688	ATU035 628	ATL8C1 928:65 3..115	nap				ATL8C1 928:27 2..115	0.67	g43357 37	32	131	7.7e- 10	thalia na] (AC006 248) putati ve serine /threo nine kinase [Arabi dopsis thalia na]
173689	ATU035 629	ATL8S5 532:58 1..53	nap				ATL8S5 532:43 6..74	0.67	g11426 3	32	519	1.2e- 50	ASPARA GINE SYNTH TASE B (GLUTA MINE- HYDROL YZING) [Esche richia coli]
173690	ATU035 630	ATL8C3 0720:2 66..16 84	nap				ATL8C3 0720:2 94..16 84	0.67	g33416 97	32	243	2.6e- 09	(AC003 672) hypoth etical protei n [Arabi dopsis thalia na]
173691	ATU035 631	ATL8C9 115:16 02..1	nap				ATL8C9 115:16 02..13 1	0.67	g37460 69	32	1268		(AC005 311) putati ve revers

173692	ATU035 632	ATL8C2 4432:2 028..1	nap					ATL8C2 4432:1 467..5 54	0.66			g41021 88, g36431 90	32, 31	336, 288	5.0e- 28, 1.4e- 17	(AF009 670) MRP3 [Homo sapien s]; (AF087 138) sulfon ylurea recept or 1 [Homo sapien s]	e transc riptas e [Arabi dopsis thalia na]
173693	ATU035 633	ATL8C4 8522:1 ..1768	nap					ATL8C4 8522:5 25..13 78	0.66			g30436 12	32	197	4.3e- 16	(AB011 116) KIAA05 44 protei n [Homo sapien s]	
173694	ATU035 634	ATL8C1 9219:6 69..11 32	nap					ATL8C1 9219:9 54..80 7	0.66			g62966 9	32	189	1.5e- 18	hypoth etical protei n - tomato []	
173695	ATU035 635	ATL8S8 457:59	nap					ATL8S8 457:59	0.66			g45800 31	32	241	2.1e- 14	(AF086 638)	

173696	ATU035 636	9..115	nap				7..115	0.66	g45860 36	32	316	1.2e- 29	(AC007 109) hypoth etical protei n [Arabi dopsis thalia na]	unknow n [Pseud omonas putida GB-1]
173697	ATU035 637	ATL8S8 944:1. .518	nap				ATL8C3 5708:7 5..459	0.66	g44689 84	32	778	3.7e- 64	(AL035 605) putati ve protei n [Arabi dopsis thalia na]	
173698	ATU035 638	ATL8S2 4944:5 80..1	nap				ATL8S2 4944:3 79..71	0.65	g36458 98	32	819	2.3e- 84	(U6840 8) in- frame stop codon; possib ly a post- transp ositio n mutati on [Zea	

173699	ATU035 639	ATL8S3 953:56 7..1	nap				ATL8S3 953:46 9..89	0.65	g19463 00	32	59	0.0035	(Y1252 9) hypoth etical protein [Silene latifolia]
173700	ATU035 640	ATL8C1 9206:1 ..876	nap				ATL8C1 9206:1 33..79 4	0.65	g32015 54	32	415	1.7e- 44	(AJ006 501) beta- D- glucos idase [Tropa eolum majus]
173701	ATU035 641	ATL8C3 6573:1 32..25 81	nap				ATL8C3 6573:1 32..25 81	0.65	g45811 64	32	705	8.1e- 66	(AC006 220) putati ve polypr oteins [Arabi dopsis thalia na]
173702	ATU035 642	ATL8S1 3366:5 0..549	nap				ATL8S1 3366:5 0..506	0.65	g22135 88	32	121	8.4e- 10	(AC000 348) T7N9.8 [Arabi dopsis thalia na]
173703	ATU035 643	ATL8C4 3243:1 33..56	nap				ATL8C4 3243:1 33..53	0.64	g13541 7	32	685	5.5e- 65	TUBULI N ALPHA-

		0						9									3
																	CHAIN [Zea mays]
173704	ATU035 644	ATL8S2 9994:4 95..1	nap					ATL8S2 9994:4 12..52	0.64	g10766 34	32	190	6.4e- 20	protei n- serine /threo nine kinase NPK15 - common tobacc o [Nicot iana tabacu m]			
173705	ATU035 645	ATL8S1 0460:3 96..1	nap					ATL8S1 0460:3 96..36	0.64	g17230 94	32	531	1.1e- 45	PUTATI VE CYTOCH ROME P450 CY50.2 6 [Mycob acteri um tuberc ulosis]			
173706	ATU035 646	ATL8S1 7488:1 ..447	nap					ATL8S1 7488:5 0..447	0.63	g26741 8	32	510	3.1e- 48	MANNOS E-6- PHOSPH ATE ISOMER ASE (PHOSP HOMANN			

173707	ATU035 647	ATL8S1 4110:4 85..1	nap						ATL8S1 4110:2 04..44	0.63	g26641 0	32	216	4.5e- 21	CDC2+/ CDC28- RELATE D PROTEI N KINASE R2 [Oryza sativa]
173708	ATU035	ATL8S2	nap						ATL8S2	0.62	g62989	32	99	0.9995	hypoth

648	8733:1 ..407					8733:2 00..16 8	0.62	g17888 84	32	50	5.3e- 05	etical 47.8K protei n - Pneumo cystis carini i [Pneum ocysti s carini i]
173709	ATU035 649	ATL8S1 2354:1 ..448	nap			ATL8S1 2354:4 7..448	0.62	g17888 84	32	50	5.3e- 05	(AE000 340) putati ve enzy me (3.4.-) [Esche richia coli]
173710	ATU035 650	ATL8S2 386:32 9..1	nap			ATL8S2 386:16 6..88	0.62	g34027 18	32	133	7.4e- 13	(AC004 261) hypo thetical protei n [Arabi dopsis thalia na]
173711	ATU035 651	ATL8S1 0189:2 28..62 3	nap			ATL8S1 0189:2 28..54 7	0.62	g45858 77	32	162	2.1e- 15	(AC005 850) Hypo thetical protei n [Arabi

173712	ATU035 652	ATL8C4 5290:9 71..18 7	nap					ATL8C4 5290:9 28..34 9	0.61	g32876 93	32	658	4.5e- 65	dopsis thalia na] (AC003 979) Simila r to LIM17 gene produc t gb 165 3769 from the genome of Synech ocysti s sp. gb D90 916. [Arabi dopsis thalia na]
173713	ATU035 653	ATL8C1 1742:8 17..14 91	nap					ATL8C1 1742:8 17..13 98	0.61	g21911 54	32	623	7.4e- 66	(AF007 269) A IG00 2N01.1 1 gene produc t [Arabi dopsis thalia na]
173714	ATU035 654	ATL8C6 013:1. .413	nap					ATL8C6 013:89 ..328	0.61	g43357 37	32	156	3.8e- 15	(AC006 248) putati

173715	ATU035 655	ATL8S1 3434:5 78..1	nap					ATL8S1 3434:5 16..13 1	0.60	g24594 19	32	841	5.8e- 70	ve serine /threo nine kinase [Arabi dopsis thalia na]
173716	ATU035 656	ATL8S2 7629:5 31..1	nap					ATL8S2 7629:3 41..43	0.60	g44689 86	32	489	3.5e- 30	(AC002 332) hypoth etical protei n [Arabi dopsis thalia na]
173717	ATU035 657	ATL8S2 4954:2 83..46 5	nap					ATL8S2 4954:3 04..44 1	0.59	g12446 53	32	74	0.39	(U4100 0) gag gene produc t [Zea mays]
173718	ATU035 658	ATL8C3 4994:1 787..8 99	nap					ATL8C3 4994:1 717..8 99	0.59	g30470 71	32	1047	9.7e- 105	(AF058 825) simila r to

173719	ATU035 659	ATL8S1 812:1. .490	nap						ATL8S1 812:75 ..318	0.59	g46782 05	32	684	1.3e- 50	maize transp oson MuDR (GB:M7 6978) [Arabi dopsis thalia na]
173720	ATU035 660	ATL8C8 194:26 32..38 0	nap						ATL8C8 194:24 44..19 00	0.59	g22449 13	32	691	1.8e- 75	(Z9733 9) simila r to SEN1 protei n - yeast [Arabi dopsis thalia na]
173721	ATU035 661	ATL8S2 309:29 ..567	nap						ATL8S2 309:66 ..467	0.57	g33293 30	32	137	4.6e- 08	(AE001 358) [Chlam ydia tracho matis]
173722	ATU035 662	ATL8C5 909:16	nap						ATL8C5 909:16	0.56	g40637 60	32	1804		(AC005 561)

173723	ATU035 663	ATL8C1 1193:4 46..1	nap				58..8	0.56	g26888 30	32	113	1.2e- 09	putati ve POL3 protei n [Arabi dopsis thalia na]
							ATL8C1 1193:4 40..32						(AF000 952) putati ve sugar transp orter [Prunu s armeni aca]
173724	ATU035 664	ATL8C3 4303:1 075..1	nap				ATL8C3 4303:7 09..52	0.56	g37023 31	32	760	7.7e- 59	(AC005 397) hypoth etical protei n [Arabi dopsis thalia na]
173725	ATU035 665	ATL8C2 7725:1 832..2 56	nap				ATL8C2 7725:1 729..2 56	0.55	g29110 48	32	491		(AL021 961) hypoth etical protei n [Arabi dopsis thalia na]

173726	ATU035 666	ATL8C1 9515:1 ..1105	nap			ATL8C1 9515:1 1..907	0.55	g33778 31	32	1286	8.1e- 133	(AF075 598) r to maize transp oson MuDR mudrA (GB:M7 6978) [Arabi dopsis thalia na]
173727	ATU035 667	ATL8C8 738:85 6..1	nap			ATL8C8 738:68 4..34	0.55	g32427 28	32	1341	6.7e- 106	(AC003 040) unknow n protei n [Arabi dopsis thalia na]
173728	ATU035 668	ATL8C2 0458:5 41..1	nap			ATL8C2 0458:5 02..16 7	0.55	g34027 09	32	384	2.8e- 35	(AC004 261) hypoth etical protei n [Arabi dopsis thalia na]
173729	ATU035 669	ATL8S1 0836:5 05..19 7	nap			ATL8S1 0836:3 57..21 8	0.55	g49028 69	32	73	9.5e- 06	(AJ242 573) ORFAB [Sinor hizobi

173730	ATU035 670	ATL8C4 6211:1 .1535	nap				ATL8C4 6211:2 37..14 55	0.54	g44328 07	32	1158	3.4e- 119	um melilo tij (AC006 570) putati ve polypr oteins [Arabi dopsis thalia na]
173731	ATU035 671	ATL8S8 997:1. .594	nap				ATL8S8 997:24 3..318	0.54	g28092 51	32	461	1.4e- 46	(AC002 560) F21B7. 20 [Arabi dopsis thalia na]
173732	ATU035 672	ATL8S3 0584:8 3..581	nap				ATL8S3 0584:8 3..345	0.54	g35401 86	32	343	7.3e- 26	(AC004 122) Hypoth etical protei n [Arabi dopsis thalia na]
173733	ATU035 673	ATL8C3 1600:5 93..15 32	nap				ATL8C3 1600:5 93..12 96	0.53	g49143 81	32	482	3.2e- 48	(AC007 584) unknow n protei n [Arabi dopsis thalia na]

173734	ATU035 674	ATL8C4 0076:1 ..939	nap				ATL8C4 0076:2 ..859	0.53	g21601 65	32	856	1.9e- 90	na] (AC000 132) F21M12 .11 gene produc t [Arabi dopsis thalia na]
173735	ATU035 675	ATL8C1 9188:7 18..1	nap				ATL8C1 9188:6 25..74	0.53	g35823 36	32	188	0.0081	(AC005 496) hypoth etical protei n [Arabi dopsis thalia na]
173736	ATU035 676	ATL8S1 5829:3 1..373	nap				ATL8S1 5829:1 23..24 9	0.53	g33782 69	32	191	4.2e- 11	(AF079 317) 3- isopro pymal ate dehydr ogenas e [Sphin gomona s aromat icivor ans]
173737	ATU035 677	ATL8S1 3143:5 24..1	nap				ATL8S1 3143:4 42..77	0.52	g10754 99	32	623	3.2e- 60	groEL protei n -

173738	ATU035 678	ATL8S1 5411:1 36..49 0	nap						ATL8S1 5411:1 36..48 0	0.52	g29837 68	32	71	0.0085	(AE000 736) alcohol dehydr ogenase [Aquif ex aeolic us]	Porphy romona s gingiv alis [Porphy romonas gingiv alis]
173739	ATU035 679	ATL8C2 4369:8 65..1	nap						ATL8C2 4369:6 20..17 5	0.52	g43097 55	32	289	7.7e- 31	(AC006 217) putative transp osase [Arabi dopsis thalia na]	
173740	ATU035 680	ATL8C2 516:15 03..1	nap						ATL8C2 516:14 18..67 6	0.52	g48951 69	32	891	2.2e- 85	(AC007 662) putative helica se [Arabi dopsis thalia]	

173741	ATU035 681	ATL8C8 82:1.. 1006	nap				ATL8C8 82:313 ..410	0.52	g39414 24	32	151	2.6e- 13	na] (AF062 866) putati ve transc riptio n factor [Arabi dopsis thalia na]
173742	ATU035 682	ATL8C3 7855:1 165..1	nap				ATL8C3 7855:1 111..1 2	0.51	g48369 17	32	525	6.2e- 51	(AC007 153) 80099 [Arabi dopsis thalia na]
173743	ATU035 683	ATL8S2 7054:3 60..1	nap				ATL8S2 7054:2 10..7	0.51	g45389 69	32	277	2.9e- 25	(AL049 488) putati ve protei n [Arabi dopsis thalia na]
173744	ATU035 684	ATL8C4 5706:1 065..2 22	nap				ATL8C4 5706:9 17..87 6	0.49	g33675 96	32	207	1.3e- 17	(AL031 135) putati ve protei n [Arabi dopsis thalia na]

173745	ATU035 685	ATL8C1 966:13 7..123 1	nap				ATL8C1 966:13 7..107 9	0.49	g26267 53	32	670	1.6e- 63	(AB008 782) sulfat e transp orter [Arabi dopsis thalia na]
173746	ATU035 686	ATL8C8 394:1. .343	nap				ATL8C8 394:13 7..306	0.49	g26421 59	32	317	1.1e- 30	(AC003 000) putati ve mannos e-1- phosph ate guanyl transf erases [Arabi dopsis thalia na]
173747	ATU035 687	ATL8C4 7196:8 85..1	nap				ATL8C4 7196:6 50..46 1	0.49	g13620 07	32	568	7.7e- 55	thioglu cosid ase (EC 3.2.3. 1) - Arabid opsis thalia na [Arabi dopsis thalia na]
173748	ATU035	ATL8S2	nap				ATL8S2	0.49	g48357	32	273	1.6e-	(AC007

173749	ATU035 689	ATL8C6 017:73 9..50	nap					4321:3 44..7	65					22	202) Is a member of the PF1001 71 aldehy de dehydr ogenas e family . ESTs gb T21 534, gb N65 241 and gb AA3 95614 come from this gene. [Arabi dopsis thalia na]
173750	ATU035	ATL8S1	nap					ATL8S1	0.48	g45824 58	32	564	4.4e- 55	1.1e-	(AC007 071) hypothe tical protein [Arabi dopsis thalia na] (AC005

173751	690	5193:6 63..1					5193:4 86..20 3	0.48	g33554 67	32	742	2.3e- 73	662) putati ve strict osidin e syntha se [Arabi dopsis thalia na]
	ATU035 691	ATL8C4 1158:6 19..1	nap				ATL8C4 1158:5 86..80						(AC004 218) hypoth etical protei n [Arabi dopsis thalia na]
173752	ATU035 692	ATL8S1 1691:5 18..1	nap				ATL8S1 1691:4 59..63	0.47	g27314 43	32	122	2.8e- 13	(U9692 3) [Asper gillus niger]
173753	ATU035 693	ATL8C4 877:15 93..15 3	nap				ATL8C4 877:15 41..15 3	0.47	g25586 57	32	715	8.4e- 78	(AC002 354) No defini tion line found [Arabi dopsis thalia na]
173754	ATU035 694	ATL8C3 3339:1	nap				ATL8C3 3339:1	0.46	g44173 09	32	732	2.4e- 58	(AC006 446)

173755	ATU035 695	..782					16..52 2	0.46	g47339 75	32	150	4.3e- 10	putative polypeptide with a reverse transcriptase domain [Arabidopsis thaliana]
	ATL8C3 0124:2 97..1	nap					ATL8C3 0124:2 97..18 3	0.46	g47339 75	32	150	4.3e- 10	(AC007264) hypothetical protein [Arabidopsis thaliana]
173756	ATU035 696						ATL8S8 052:36 0..48	0.45	g45126 23	32	292	4.1e- 23	(AC004793) Containing similarity to [Arabidopsis thaliana]
	ATL8S8 052:36 0..48	nap					ATL8S8 052:26 8..92	0.45	g45126 23	32	292	4.1e- 23	(AC004793) Containing similarity to [Arabidopsis thaliana]
173757	ATU035 697						ATL8S2 9645:1 ..529	0.44	g33677 50	32	395	1.4e- 33	(AL031155) putative
	ATL8S2 9645:1 ..529	nap					ATL8S2 9645:5 3..520	0.44	g33677 50	32	395	1.4e- 33	(AL031155) putative

173758	ATU035 698	ATL8S2 0932:4 45..1	nap						ATL8S2 0932:4 42..73	0.44		g26499 14	32	177	1.3e- 15	amidas e [Strep tomyce s coelic olor]
173759	ATU035 699	ATL8C3 1957:1 ..720	nap						ATL8C3 1957:4 69..62 3	0.44		g40380 33	32	603	6.9e- 57	(AE001 056) aspart ate kinase (lysC) [Archa eoglob us fulgid us]
173760	ATU035 700	ATL8C4 6640:1 ..606	nap						ATL8C4 6640:1 87..53 2	0.44		g24648 65	32	694	1.2e- 70	(AC005 936) MuDR- like protei n [Arabi dopsis thalia na]
																(Z9970 7) pectin estera se like protei n [Arabi dopsis thalia na]

173765	ATU035 705	ATL8C2 3170:1 680..7 98	nap					ATL8C2 3170:1 531..1 067	0.42	g44552 59	32	735	1.9e- 78	otein [Arabi dopsis thalia na]
173766	ATU035 706	ATL8C2 6350:7 30..1	nap					ATL8C2 6350:6 88..32 6	0.42	g25650 11	32	611	8.4e- 43	(AL035 523) putati ve Ser/Th r protei n kinase [Arabi dopsis thalia na]
173767	ATU035 707	ATL8C3 2883:6 28..1	nap					ATL8C3 2883:5 72..9	0.42	g32424 45	32	320	9.2e- 29	(AC002 983) putati ve MuDR- A-like transp oson protei n [Arabi dopsis thalia na]
														(AB001 739) SNA41 [Schiz osacch aromyc es pombe]

173768	ATU035 708	ATL8C3 3219:1 411..1	nap			ATL8C3 3219:7 42..14	0.41	g22448 02	32	1281	7.5e- 125	(Z9733 6) retrov irus- relate d polypr oteins homolo g [Arabi dopsis thalia na]
173769	ATU035 709	ATL8C8 395:11 66..1	nap			ATL8C8 395:92 6..302	0.41	g21911 51	32	275	2.6e- 27	(AF007 269) contai ns simila rity to membra ne associ ated salt- induci ble protei n [Arabi dopsis thalia na]
173770	ATU035 710	ATL8S1 5054:2 48..1	nap			ATL8S1 5054:2 45..13	0.41	g25074 85	32	118	1.9e- 09	HYPOTH ETICAL 28.5 KD PROTEI N IN

173771	ATU035 711	ATL8C2 0911:1 ..1018	nap					ATL8C2 0911:2 17..74 5	0.41			g36458 99	32	1570	7.6e- 162	HPT- PAND INTERG ENIC REGION [Esche richia coli]
																(U6840 8) 5' end not determ ined experi mental ly [Zea mays]
173772	ATU035 712	ATL8C3 4246:1 080..1	nap					ATL8C3 4246:9 60..29	0.41			g43357 17	32	869	5.1e- 87	(AC006 248) putati ve revers e transc riptas e [Arabi dopsis thalia na]
173773	ATU035 713	ATL8S4 332:39 7..1	nap					ATL8S4 332:31 2..12	0.40			g45396 64	32	224	5.2e- 18	(AF061 282) hypothe tical protei n [Sorgh um]

173778	ATU035 718	ATL8S1 943:55 3..343	nap										g17698 99	32	163	1.9e- 12	(Y0801 0) lectin recept or kinase [Arabi dopsis thalia na]	riptas e [Arabi dopsis thalia na]
173779	ATU035 719	ATL8C4 1667:4 99..18 5	nap										g26232 97	32	218	5.2e- 23	(AC002 409) unknow n protei n [Arabi dopsis thalia na]	(AC002 409) unknow n protei n [Arabi dopsis thalia na]
173780	ATU035 720	ATL8S6 831:54 3..234	nap										g45859 86	32	115		(AC005 287) Hypoth etical protei n [Arabi dopsis thalia na]	(AC005 287) Hypoth etical protei n [Arabi dopsis thalia na]
173781	ATU035 721	ATL8C1 9847:1 254..7 35	nap										g44552 32	32	714	1.7e- 70	(AL035 523) putati ve	(AL035 523) putati ve

173782	ATU035 722	ATL8C3 5462:1 ..1227	nap										g49143 61	32	1164	4.2e- 110	prote n [Arabi dopsis thalia na] (AC007 289) putati ve revers e transc riptas e [Arabi dopsis thalia na]
173783	ATU035 723	ATL8C2 0194:6 55..27 4	nap										g32506 89	32	223	3.1e- 19	(AL024 486) chitin ase - like protei n [Arabi dopsis thalia na]
173784	ATU035 724	ATL8C3 5510:6 73..83 4	nap										g28298 97	32	114	3.2e- 07	(AC002 311) Unknow n protei n [Arabi dopsis thalia na]

173785	ATU035 725	ATL8C3 4934:1 447..1 66	nap							g45811 10	32	1129	2.2e- 118	(AC005 825) putati ve retrot ranspo son polypr oteins [Arabi dopsis thalia na]
173786	ATU035 726	ATL8C3 224:13 19..1	nap							g43357 20	32	1265	5.3e- 100	(AC006 248) putati ve revers e transc riptas e Tal- 1 [Arabi dopsis thalia na]
173787	ATU035 727	ATL8C2 0675:1 34..18 04	nap							g46894 52	32	81	0.96	(AC006 267) putati ve transp oson protei n [Arabi dopsis thalia na]
173788	ATU035	ATL8C3	nap							g22448	32	530	1.9e-	(Z9733)

173789	728	2369:6 88..1								39				50	7) hypothetical protein [Arabidopsis thaliana]
	ATU035 729	ATL8S6 226:29 6..1	nap							g17810 74	32	152			(283863) mrr [Mycobacterium tuberculosis]
173790	730	ATL8C7 731:13 59..34 6	nap							g36458 99	32	1663	2.6e-170		(U68408) 5' end not determined experimentally [Zea mays]
173791	731	ATL8C2 1089:4 23..1	nap							g48368 69	32	573	2.3e-55		(AC007260) lcl prt_seq No definition line found [Arabidopsis thaliana]

173802	ATU035 742	55..28 3	nap										g11465 4	32	104	1.2e- 06	F17L21 .2 [Arabi dopsis thalia na]
		ATL8C1 618:71 3..791															ATP SYNTHA SE C CHAIN (LIPID - BINDIN G PROTEI N) (SUBUN IT III) [Nicot iana tabacu m]
173803	ATU035 743	ATL8C9 454:14 59..1	nap										g45726 72	32	218	3.7e- 11	(AC006 954) hypoth etical protei n [Arabi dopsis thalia na]
173804	ATU035 744	ATL8C1 7252:1 ..509	nap										g43097 55	32	418	4.1e- 42	(AC006 217) putati ve transp osase [Arabi

173805	ATU035 745	ATL8C2 2366:6 059..8 756	nap											g42636 53	32	72	0.079	dopsis thalia na] (AC006 136) hypoth etical protei n [Arabi dopsis thalia na]
173806	ATU035 746	ATL8C9 389:1. .1585	nap											g45443 72	32	1320	1.1e- 138	(AC006 920) putati ve revers e transc riptas e [Arabi dopsis thalia na]
173807	ATU035 747	ATL8C3 71:688 ..1013	nap											g33416 95	32	351	6.0e- 18	(AC003 672) putati ve thiami n pyroph osphok inase [Arabi dopsis thalia na]
173808	ATU035	ATL8C8	nap											g44552	32	363	6.5e-	(AL035

748	266:1. .321									77			39	527) gibber ellin 3 beta- hydrox ylase- like protei n [Arabi dopsis thalia nal]
173809	ATU035 749	ATL8C2 5366:1 ..341	nap							g42636 43	32	117	0.0080	(AC006 136) hypoth etical protei n [Arabi dopsis thalia nal]
173810	ATU035 750	ATL8C2 2703:2 63..50 1	nap							g21911 60	32	327	3.8e- 32	(AF007 270) Simila r to pectin estera se [Arabi dopsis thalia nal]
173811	ATU035 751	ATL8C3 3304:1 ..518	nap							g47412 04	32	136	2.0e- 11	(AL049 746) putati ve protei

173812	ATU035 752	ATL8C3 3133:1 995..1	nap									g42638 31	32	1492	1.3e- 147	(AC006 067) putati ve revers e transc riptas e [Arabi dopsis thalia na]
173813	ATU035 753	ATL8C4 2721:2 033..7 50	nap									g23156 68	32	391	6.0e- 40	(AF016 671) simila r to alpha/ gamma adapti ns [Caeno rhabdi tis elegan s]
173814	ATU035 754	ATL8S1 9930:5 08..18 2	nap									g29397 3	32	181	4.1e- 13	(L0784 5) ADP-L- glycer o-D- mannoh eptose epimer ase

173819	ATU035 759	ATL8C1 5460:1 329..1	nap									g22450 97	32	681	1.8e- 65	(Z9734 3) hypoth etical protein [Arabi dopsis thalia nal]	reverse transc riptase domain [Arabi dopsis thalia nal]
173820	ATU035 760	ATL8C2 5157:1 ..714	nap									g32528 07	32	311	7.9e- 14	(AC004 705) hypoth etical protein [Arabi dopsis thalia nal]	(AC004 705) hypoth etical protein [Arabi dopsis thalia nal]
173821	ATU035 761	ATL8C2 3113:1 141..1	nap									g45876 02	32	1057	6.1e- 103	(AC006 951) putative retrotrans poson hopsco tch polypr	(AC006 951) putative retrotrans poson hopsco tch polypr

173822	ATU035 762	ATL8C3 2912:3 63..1	nap									g13635 28	32	592	7.2e- 57	gag protei n - maize [Zea mays]	otein [Arabi dopsis thalia na]
173823	ATU035 763	ATL8C1 5286:2 471..1	nap									g45811 64, g44327 94	32, 31	788, 977	3.7e- 77, 3.3e- 99	(AC006 220) putati ve polypr otein [Arabi dopsis thalia na]; (AC006 437) putati ve Tnp2 Taml transp oson protei n [Arabi dopsis thalia na]	otein [Arabi dopsis thalia na]; (AC006 437) putati ve Tnp2 Taml transp oson protei n [Arabi dopsis thalia na]
173824	ATU035 764	ATL8C1 4414:1 110..2 45	nap									g36680 89	32	1440	2.0e- 129	(AC004 667) unknow n protei	na]

173828	ATU035 768	ATL8C2 444:71 2..1	nap									g41153 76	32	1078	3.0e- 108	e [Arabi dopsis thalia na] (AC005 967) unknow n protei n [Arabi dopsis thalia na]
173829	ATU035 769	ATL8S1 6411:1 ..556	nap									g26211 20	32	46	0.0048	(AE000 799) O- linked GlcNAC transf erase [Metha nobact erium thermo autotr ophicu m]
173830	ATU035 770	ATL8S2 376:1. .535	nap									g30333 77	32	129	3.5e- 10	(AC004 238) putati ve ber ber ine bridge enzyme [Arabi dopsis thalia]

173843	ATU035 783	ATL8C3 1293:4 59..94 4	nap										g33193 71	32	464	1.4e- 30	(AF077 409) Simila r to pectin estera se; T24M8. 6 [Arabi dopsis thalia na]	RRNA HELICA SE RRP3 [Sacch aromyc es cerevi siae]
173844	ATU035 784	ATL8S1 3178:2 19..1	nap										g39284 99	32	116	0.045	(AJ009 858) putati ve regula tory protei n [Pseud omonas aerugi nosa]	(AJ009 858) putati ve regula tory protei n [Pseud omonas aerugi nosa]
173845	ATU035 785	ATL8C1 1244:1 ..1659	nap										g36000 30	32	181	3.3e- 20	(AF080 119) contai ns simila rity	(AF080 119) contai ns simila rity

173848	ATU035 788	ATL8C1 102:1. .671	nap						g21911 32	32	696	1.4e- 52	(AF007 269) contai ns weak simila rity to nebuli n [Arabi dopsis thalia na]
173849	ATU035 789	ATL8S2 2308:1 ..197	nap						g40564 44	32	217	5.2e- 19	(AC005 990) Simila r to OBP32p ep protei n gb U37 698 from Arabid opsis thalia na. [Arabi dopsis thalia na]
173850	ATU035 790	ATL8C4 5551:1 170..1	nap						g43357 20	32	1030	3.1e- 94	(AC006 248) putati ve revers e transc

173851	ATU035 791	ATL8S2 6801:1 ..293	nap									g27393 87	32	157			riptas e Tal- 1 [Arabi dopsis thalia nal]
173852	ATU035 792	ATL8C3 8789:1 ..444	nap									g28322 44	32	458	1.0e- 37		(AC002 505) hypoth etical protei n [Arabi dopsis thalia nal] (AF031 569) hypoth etical protei n [Zea mays]
173853	ATU035 793	ATL8S1 3640:1 ..600	nap									g40564 21	32	107	4.0e- 08		(AC005 322) Simila r to gb Z30 094 basic transc ription factor 2, 44 kD subuni t from Homo

173854	ATU035 794	ATL8S1 3715:2 12..48 8	nap							g18813 31	32	280	1.5e- 20	(AB001 488) FUNCTI ON UNKNOWN, SIMILAR PRODUCT IN E. COLI. [Bacillus subtilis]	sapien s. EST gb W43 325 comes from this gene. [Arabi dopsis thalia na]
173855	ATU035 795	ATL8C3 8146:2 957..2 212	nap							g40630 07	32	254	6.1e- 08	(AB021 706) uncou pling protei n [Arabi dopsis thalia na]	
173856	ATU035	ATL8S1	nap							g23159	32	144	2.4e-	ATP	

	796	3791:1 ..480							6			08	SYNTHA SE BETA CHAIN [Cuscu ta reflex a]
173857	ATU035 797	ATL8S1 4173:1 ..690	nap						g26504 19	32	138	2.2e- 13	(AE001 090) branch ed- chain amino acid ABC transp orter, ATP- bindin g protei n (braF- 1) [Archa eoglob us fulgid us]
173858	ATU035 798	ATL8C1 040:88 4..1	nap						g44328 58	32	735	4.5e- 65	(AC006 300) putati ve diseas e resist ance protei n

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100

173859	ATU035 799	ATL8S1 434:1. .104	nap							g17857 59	32	100	2.2e- 07	[Arabi dopsis thalia na] (Y0850 2) orf106 e [Arabi dopsis thalia na]
173860	ATU035 800	ATL8S3 021:73 ..1	nap							g31352 59	32	101	3.4e- 06	(AC003 058) hypoth etical protei n [Arabi dopsis thalia na]
173861	ATU035 801	ATL8S3 0017:1 ..435	nap							g84040	32	104	0.014	hypoth etical protei n 4 - Trypan osoma brucei mitoch ondrio n (SGC6) []
173862	ATU035 802	ATL8C1 0137:1 ..958	nap							g43097 55	32	671		(AC006 217) putati ve transp osase

173870	ATU035 810	ATL8C2 6572:5 2..567	nap						ATL8C2 6572:5 2..176	1.00	g42043 11	31	74	0.012	thalia nal (AC003 027) lcllpr t_seq No defini tion line found [Arabi dopsis thalia nal]
173871	ATU035 811	ATL8C1 6599:1 ..396	nap						ATL8C1 6599:2 34..39 6	1.00	g29245 07	31	251	4.9e- 23	(AL022 023) cyclop hilin- like protei n [Arabi dopsis thalia nal]
173872	ATU035 812	ATL8S2 1965:5 53..1	nap								g25016 88	32	226	4.2e- 22	HYPOTH ETICAL 62.1 KD PROTEI N CY9C4. 03C [Mycob acteri um tuberc ulosis]

173873	ATU035 813	ATL8S7 153:51 8..1	nap							g28322 44	32	316	8.8e- 22	(AF031 569) hypoth etical protei n [Zea mays]
173874	ATU035 814	ATL8C4 1377:5 825..1	nap							g43780 66, g42638 31	32, 31	663, 1141	6.3e- 45, 7.7e- 79	(AF098 806) polypr oteins [Sorgh um bicolor]; (AC006 067) putati ve revers e transc riptase [Arabi dopsis thalia na]
173875	ATU035 815	ATL8S1 8202:1 ..589	nap							g37383 34	32	119	1.9e- 07	(AC005 170) unknow n protei n [Arabi dopsis thalia na]
173876	ATU035	ATL8S1	nap							g29824	32	754	1.2e-	(AL022

the first two rows are in the same column as the first row, and the other two rows are in the same column as the second row.

	816	8208:1 ..536											62				78	223) putati ve protei n [Arabi dopsis thalia na]
173877	ATU035 817	ATL8S2 269:57 2..185	nap										g55194 8	32	131	1.3e- 11	(M6389 1) ORF [Plasm id pTB19]	
173878	ATU035 818	ATL8S1 8282:5 17..1	nap										g46462 24	32	374	2.2e- 30	(AC007 295) hypoth etical protei n [Arabi dopsis thalia na]	
173879	ATU035 819	ATL8S2 6064:1 ..413	nap										g38602 52	32	208	4.6e- 18	(AC005 824) hypoth etical protei n [Arabi dopsis thalia na]	
173880	ATU035 820	ATL8C4 1135:1 051..1	nap										g29613 49	32	1036	2.1e- 106	(AL022 140) LTR retrot ranspo son	

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173881	ATU035 821	ATL8C2 8623:3 56..97 0	nap										g39415 24	32	389	1.6e- 38	like protei n [Arabi dopsis thalia na]
173882	ATU035 822	ATL8C4 7363:7 64..1	nap										g45586 64	32	485	2.0e- 49	(AC007 063) hypoth etical protei n [Arabi dopsis thalia na]
173883	ATU035 823	ATL8C3 7934:1 ..1269	nap										g45672 77	32	1731	1.9e- 179	(AC006 841) putati ve pol protei n with Zn finger CCHC type domain

173886	ATU035 826	ATL8S2 1170:1 ..381	nap										g41855 49	32	209	1.1e- 13	(AF108 766) molybd enum cofact or biosyn thesis protei n A [Rhodo bacter sphaer oides]	GAR TRANSF ORMYLA SE) [Metha nococc us jannas chii]
173887	ATU035 827	ATL8C3 0133:1 ..540	nap										g30803 61	32	493	3.0e- 30	(AL022 580) hypoth etical protei n [Arabi dopsis thalia nal]	
173888	ATU035 828	ATL8C4 7510:1 89..94 6	nap										g49268 70	32	786	2.2e- 71	(AC007 509) putati ve revers e transc	

173889	ATU035 829	ATL8S7 561:1. .439	nap						g23427 33	32	160	0.99	(AC002 341) hypoth etical protei n [Arabi dopsis thalia na]
173890	ATU035 830	ATL8C4 0732:1 ..653	nap						g13532 66	32	440	7.0e- 37	(U2759 0) Fe(II) transp ort protei n [Sacch aromyc es cerevi siae]
173891	ATU035 831	ATL8S7 6:1..3 82	nap						g48742 67	32	176	2.9e- 13	(AC007 354) Strong simila rity to gb X56 267 auxin- induce d protei

173892	ATU035 832	ATL8S2 1033:3 19..1	nap									g29l10 60	32	165	9.6e- 10	(AlO21 961) putati ve protei n [Arabi dopsis thalia na]
173893	ATU035 833	ATL8S2 7244:3 3..549	nap									g27390 04	32	297	6.1e- 26	(AF022 461) CYP82C lp [Glyci ne max]

173894	ATU035 834	ATL8S2 2870:7 4..347	nap							g45859 67	32	166	7.8e- 15	(AC005 287) Hypoth etical protei n [Arabi dopsis thalia nal]
173895	ATU035 835	ATL8S7 8:1..4 22	nap							g16528 69	32	129	3.4e- 12	(D9090 9) NADH dehydr ogenas e [Synec hocyst is sp.]
173896	ATU035 836	ATL8S2 7223:1 26..49 0	nap							g11464 0	32	406	8.9e- 36	ATP SYNTHA SE GAMMA CHAIN, CHLORO PLAST PRECUR SOR [Pisum sativu m]
173897	ATU035 837	ATL8S1 9074:1 ..187	nap							g26130 88	32	162	1.7e- 12	(AF030 316) OmpR [Yersi nia entero coliti ca]

173898 173899 173900 173901 173902 173903 173904 173905 173906 173907 173908 173909 173910 173911 173912 173913 173914 173915 173916 173917 173918 173919 173920 173921 173922 173923 173924 173925 173926 173927 173928 173929 173930 173931 173932 173933 173934 173935 173936 173937 173938 173939 173940 173941 173942 173943 173944 173945 173946 173947 173948 173949 173950 173951 173952 173953 173954 173955 173956 173957 173958 173959 173960 173961 173962 173963 173964 173965 173966 173967 173968 173969 173970 173971 173972 173973 173974 173975 173976 173977 173978 173979 173980 173981 173982 173983 173984 173985 173986 173987 173988 173989 173990 173991 173992 173993 173994 173995 173996 173997 173998 173999 174000

173898	ATU035 838	ATL8S2 0372:5 66..1	nap							g13521 77	32	503	2.1e- 47	ALTERN ATIVE CYTOCH ROME C OXIDAS E POLYPE PTIDE I (CYTOC HROME BB3 SUBUNI T 1) (OXIDA SE BB(3) SUBUNI T 1) [Brady rhizob ium japoni cum]
173899	ATU035 839	ATL8S1 9247:1 ..586	nap							g17235 58	32	213	1.5e- 22	HYPOTH ETICAL 57.2 KD PROTEI N C12B10 .16C IN CHROMO SOME I [schiz osacch aromyc es pombel]

173900	ATU035 840	ATL8C3 0547:1 014..1	nap							g44327 94	32	1501	4.6e- 151	(AC006 437) putati ve Tnp2 Taml transp oson protei n [Arabi dopsis thalia na]
173901	ATU035 841	ATL8C4 8052:5 75..11 70	nap							g28326 46	32	223	1.6e- 06	(AL021 710) MuDR transp osable elemen t - like protei n [Arabi dopsis thalia na]
173902	ATU035 842	ATL8C4 2473:2 200..3 162	nap							g42636 58	32	263	1.2e- 20	(AC006 136) hypoth etical protei n [Arabi dopsis thalia na]
173903	ATU035 843	ATL8S2 5023:2	nap							g39414 14	32	346	5.6e- 26	(AF062 861)

173904	ATU035 844	ATL8S8 360:1. .324	nap																	putative transcription factor [Arabidopsis thaliana]
173905	ATU035 845	ATL8C2 8662:9 40..25 9	nap																	OLIGOP EPTIDE TRANSP ORT ATP- BINDIN G PROTEI N OPD [Esche richia coli]
173906	ATU035 846	ATL8S1 0006:5 99..1	nap																	(AC002 130) FIN21. 13 [Arabid opsis thaliana]

173907	ATU035 847	ATL8S1 9831:4 72..22 2	nap									g17857 48	32	116	1.3e- 06	precursor [Rhodobacter capsulatus] (Y08502) cytochrome c biogenesis orf256 [Arabidopsis thaliana]
173908	ATU035 848	ATL8C4 3865:7 66..14 11	nap									g17527 34	32	598		(D78510) beta-glucan- elicitor receptor [Glycine max]
173909	ATU035 849	ATL8C4 390:1. .716	nap									g45858 84	32	398	2.7e- 41	(AC005850) Hypothetical protein [Arabidopsis thaliana]
173910	ATU035	ATL8S2	nap									g31766	32	499	2.2e-	(AC004)

173911	ATU035 851	363:37 4..1								63						22	393) Contai ns simila rity to S- recept or kinase 8 precu sor gb D38 563 from Brassi ca rapa. ESTs gb T88 253 and gb AA3 94649 come from this gene. [Arabi dopsis thalia na]
			nap							g21143 23	32	166	0.97	(D8873 4) membra ne glycop rotein [Equin e			

173915	ATU035 855	ATL8C4 6041:2 579..1	nap							g44163 01	32	1190	1.4e- 84	na] (AF105 716) gag protei n [Zea mays]
173916	ATU035 856	ATL8C4 8980:1 549..1	nap							0.99	ATL8C4 8980:1 303..2 12	258	2.7e- 12	(AC004 755) fos375 02_2 [Homo sapien s]
173917	ATU035 857	ATL8C4 535:1. .367	nap							0.99	ATL8C4 535:39 ..140	132	4.8e- 10	(AJ001 009) pore protei n of 24 kD (OEP24) [Pisum sativu m]
173918	ATU035 858	ATL8S2 2083:1 ..495	nap							0.99	ATL8S2 2083:4 3..471	402	3.9e- 37	(Z9555 6) accD1 [Mycob acteri um tuberc ulosis]
173919	ATU035 859	ATL8S1 1049:1 ..515	nap							0.99	ATL8S1 1049:8 5..503	597	1.9e- 55	(AL010 186) rocA [Mycob acteri um]

173920	ATU035 860	ATL8C4 0512:7 96..14 65	nap						ATL8C4 0512:7 96..14 39	0.99		g33954 39	31	734	1.8e- 63	um tuberc ulosis J (AC004 683) hypoth etical protei n [Arabi dopsis thalia nal]
173921	ATU035 861	ATL8C1 8926:1 ..308	nap						ATL8C1 8926:8 0..304	0.99		g42622 13	31	86	3.0e- 07	(AC006 161) hypoth etical protei n [Arabi dopsis thalia nal]
173922	ATU035 862	ATL8C3 550:1. .506	nap						ATL8C3 550:12 7..499	0.98		g34027 18	31	162	7.0e- 17	(AC004 261) hypoth etical protei n [Arabi dopsis thalia nal]
173923	ATU035 863	ATL8C1 3818:7 34..1	nap						ATL8C1 3818:7 02..96	0.98		g36680 88	31	269	7.1e- 34	(AC004 667) G9a- like protei n

173924	ATU035 864	ATL8C4 4392:2 766..3 221	nap						ATL8C4 4392:3 043..2 766	0.98	g33778 45	31	80	0.87	[Arabi dopsis thalia nal (AF076 274) contai ns simila rity to the basic region plus leucin e zipper trancr iption factor s (Pfam: bZIP.h mm, score: 12.77) [Arabi dopsis thalia nal
173925	ATU035 865	ATL8C2 6106:1 68..19 32	nap						ATL8C2 6106:1 68..19 32	0.97	g25010 11	31	776	3.0e- 66	ISOLEU CYL- TRNA SYNTH TASE (ISOLE UCINE- -TRNA LIGASE)

173926	ATU035 866	ATL8C1 2797:1 ..1236	nap						ATL8C1 2797:5 8..105 2	0.97		g45797 44	31	393	3.9e- 21	(AB017 104) DNA helica se Q1 [Mus muscul us]	(ILERS) [Synec hocyst is sp.]
173927	ATU035 867	ATL8C3 3105:1 042..2 02	nap						ATL8C3 3105:6 75..20 2	0.97		g31526 08	31	789	1.3e- 43	(AC004 482) putati ve BEL1- like homeot ic protei n [Arabi dopsis thalia na]	(AC004 482) putati ve BEL1- like homeot ic protei n [Arabi dopsis thalia na]
173928	ATU035 868	ATL8S2 7594:1 ..479	nap						ATL8S2 7594:5 3..309	0.96		g38058 47	31	137	9.1e- 13	(AL031 986) putati ve protei n [Arabi dopsis thalia na]	(AL031 986) putati ve protei n [Arabi dopsis thalia na]
173929	ATU035 869	ATL8S2 7610:5	nap						ATL8S2 7610:4	0.96		g34931 72	31	306	1.1e- 29	(U8960 9)	(U8960 9)

173930	ATU035 870	11..1	ATL8C6 030:1. .701	nap					44..26	0.96	g41153 76	31	1094	2.5e- 97	fiber annexi n [Gossy pium hirsut um] (AC005 967) unknow n protei n [Arabi dopsis thalia na]
173931	ATU035 871	ATL8C8 985:10 79..71 1	ATL8C8 985:10 08..71 1	nap					ATL8C8 985:10 08..71 1	0.96	g30333 95	31	276	6.0e- 27	(AC004 238) putati ve zinc- finger protei n [Arabi dopsis thalia na]
173932	ATU035 872	ATL8S8 525:57 1..235	ATL8S8 525:55 9..264	nap					ATL8S8 525:55 9..264	0.96	g44163 03	31	356	9.3e- 08	(AF105 716) gag protei n [Zea mays]
173933	ATU035 873	ATL8C4 9672:1 324..1	ATL8C4 9672:1 324..2 26	nap					ATL8C4 9672:1 324..2 26	0.95	g34510 76	31	1099	1.1e- 83	(AL031 326) putati ve

173934	ATU035 874	ATL8C2 7626:1 ..573	nap				ATL8C2 7626:1 63..48 6	0.95	g45845 41	31	256		protein [Arabi dopsis thalia na]
													(AL049 608) 3- hydrox yisobu tyryl- coenzy me A hydrol ase- like protei n [Arabi dopsis thalia na]
173935	ATU035 875	ATL8C3 9748:1 ..528	nap				ATL8C3 9748:1 75..52 8	0.95	g44067 64	31	488	2.3e- 40	(AC006 836) putati ve uridyl yl transf erase [Arabi dopsis thalia na]
													(AC006 836) putati ve uridyl yl transf erase [Arabi dopsis thalia na]
173936	ATU035 876	ATL8S2 2703:1 ..330	nap				ATL8S2 2703:1 53..31 5	0.94	g43357 32	31	108	3.4e- 07	(AC006 248) putati ve DNA-
													(AC006 248) putati ve DNA-

173937	ATU035 877	ATL8S1 4748:1 ..402	nap				ATL8S1 4748:7 6..385	0.94	g21450 13	31	249	9.5e- 24	bindin g protei n [Arabi dopsis thalia na]
173938	ATU035 878	ATL8C2 4877:1 346..1	nap				ATL8C2 4877:1 346..2 2	0.94	g45811 64	31	691	1.0e- 61	(U5898 8) homoge ntisat e 1,2- dioxyg enase [Mus muscul us]
173939	ATU035 879	ATL8S2 8079:5 11..1	nap				ATL8S2 8079:2 97..27 1	0.94	g48369 36	31	296	1.4e- 14	(AC006 085) Putati ve acyl- CoA:1- acylg1 lycerol -3- phosph ate acyltr

173940	ATU035 880	ATL8C4 6533:7 49..1	nap					ATL8C4 6533:7 05..66	0.94		g41857 38	31	446	4.6e- 43	anser ase [Arabi dopsis thalia nal] (AF079 998) putati ve glutam ate recept or [Arabi dopsis thalia nal]
173941	ATU035 881	ATL8C5 876:11 73..1	nap					ATL8C5 876:10 55..70 3	0.93		g33778 34	31	690		(AF075 598) No defini tion line found [Arabi dopsis thalia nal]
173942	ATU035 882	ATL8C3 731:1. .2026	nap					ATL8C3 731:83 ..1815	0.93		g48742 72	31	814	3.6e- 74	(AC007 354) Strong simila rity to gb Y09 533 involv ed in starch

														(RAPAM YCIN TARGET PROTEI N) [Rattus norvegicus]; PHOSPH ATIDYL INOSITOL 3- KINASE TOR2 (PI3- KINASE) (PTDIN S-3- KINASE) (PI3K) [Saccharomyces cerevisiae]
173944	ATU035 884	ATL8C2 8580:1 ..883	nap						0.92	g22447 85	31	412	9.0e- 43	(Z9733 5) hypothetical protein [Arabidopsis thaliana]
173945	ATU035 885	ATL8C1 5755:1	nap						0.92	g10790 63	31	247	3.1e- 21	deep orange

173946	ATU035 886	..1694	ATL8C8 976:1. .603	nap					9..169 4	0.91	g32528 11	31	113	9.2e- 05	protei n - fruit fly (Droso phila melano gaster) [Droso phila melano gaster]
173947	ATU035 887	ATL8C2 121:84 5..328	ATL8C2 121:63 7..506	nap					ATL8C2 976:15 5..346	0.91	g32978 12	31	344.	1.2e- 26	(AC004 705) hypoth etical protei n [Arabi dopsis thalia na]
173948	ATU035 888	ATL8S2 5021:7 37..1	ATL8S2 5021:7 08..34	nap					ATL8S2 5021:7 08..34	0.91	g24998 48	31	597	7.2e- 61	(AL031 032) putati ve protei n [Arabi dopsis thalia na]
									ATP- DEPEND ENT PROTEA SE LA						[Borre

173949	ATU035 889	ATL8C1 5044:1 ..869	nap				ATL8C1 5044:2 30..86 9	0.90	g34618 39	31	664	2.0e- 34	(AC005 315) putati ve recept or protei n kinase [Arabi dopsis thalia na]
173950	ATU035 890	ATL8C4 9033:1 374..1 81	nap				ATL8C4 9033:1 111..1 83	0.90	g48836 02	31	863	2.1e- 68	(AC006 922) putati ve glucan syntha se [Arabi dopsis thalia na]
173951	ATU035 891	ATL8C2 1508:1 645..1	nap				ATL8C2 1508:1 580..3 64	0.90	g37859 74	31	905	3.6e- 60	(AC005 560) putati ve DNA recomb inase [Arabi dopsis thalia na]
173952	ATU035 892	ATL8C4 8002:1 943..1	nap				ATL8C4 8002:1 943..8	0.89	g45845 41	31	294	8.9e- 24	(AL049 608) 3-

173953	ATU035 893	ATL8C1 5374:2 472..1	nap						06		0.89	g11364 34	31	819	9.2e- 57	hydrox yisobu tyr-yl- coenzy me A hydrol ase- like protei n [Arabi dopsis thalia na]
173954	ATU035 894	ATL8C6 424:11 08..1	nap							ATL8C6 424:97 1..217	0.89	g24629 35	31	894	4.4e- 88	(D8000 9) KIAA01 87 [Homo sapien s] (Y1232 1) open readin g frame 1 [Brass ica olerac ea]
173955	ATU035 895	ATL8C3 8459:1 80..69 8	nap							ATL8C3 8459:2 17..33 6	0.88	g45811 56	31	133	1.5e- 15	(AC006 919) putati ve pyruva te kinase [Arabi

173956	ATU035 896	ATL8C2 0228:9 20..16 43	nap					ATL8C2 0228:9 20..12 30	0.88	g32692 92	31	109	4.5e- 07	dopsis thalia na] (AL030 978) putati ve protei n [Arabi dopsis thalia na]
173957	ATU035 897	ATL8S1 3002:1 ..446	nap					ATL8S1 3002:5 3..421	0.88	g95236	31	64	0.019	nodula tion protei n nodT - Rhizob ium legumi nosaru m plasmid pIJ108 9 []
173958	ATU035 898	ATL8C4 7939:9 26..1	nap					ATL8C4 7939:6 49..50	0.88	g44552 59	31	568	1.7e- 46	(AL035 523) putati ve Ser/Th r protei n kinase [Arabi dopsis thalia na]

173959	ATU035 899	ATL8C3 3261:1 469..1	nap				ATL8C3 3261:1 382..2 75	0.88	g45593 51	31	121	1.3e- 12	(AC006 585) hypoth etical protei n [Arabi dopsis thalia na]
173960	ATU035 900	ATL8C2 3658:3 366..2 026	nap				ATL8C2 3658:3 330..2 026	0.87	g22571 4	31	864	2.7e- 57	urease [Canav alia ensifo rmis]
173961	ATU035 901	ATL8C7 480:1. .1395	nap				ATL8C7 480:11 35..93 2	0.87	g39278 26	31	481	1.5e- 49	(AC005 727) hypoth etical protei n [Arabi dopsis thalia na]
173962	ATU035 902	ATL8C3 0797:9 83..1	nap				ATL8C3 0797:9 51..15 2	0.87	g32928 11	31	611	5.6e- 58	(AL031 018) hypoth etical protei n [Arabi dopsis thalia na]
173963	ATU035 903	ATL8C3 458:29 1..1	nap				ATL8C3 458:29 1..144	0.86	g22805 28	31	171	6.9e- 15	(AB005 888) ATMYB3 [Arabi dopsis

173964	ATU035 904	ATL8C4 9624:1 ..1267	nap				ATL8C4 9624:5 2..110 0	0.86	g37790 21	31	1369	7.3e- 141	thalia nal (AC005 171) putati ve revers e transc riptas e [Arabi dopsis thalia nal]
173965	ATU035 905	ATL8C4 7674:1 109..1 689	nap				ATL8C4 7674:1 109..1 315	0.86	g48952 39	31	316	7.2e- 31	(AC007 659) hypoth etical protei n [Arabi dopsis thalia nal]
173966	ATU035 906	ATL8C3 3796:1 205..1	nap				ATL8C3 3796:1 122..1 60	0.86	g45811 11	31	1433	1.6e- 140	(AC005 825) putati ve revers e transc riptas e [Arabi dopsis thalia nal]
173967	ATU035 907	ATL8S2 7321:1	nap				ATL8S2 7321:9	0.86	g22136 32	31	177	8.4e- 17	(AC000 103)

173968	ATU035 908	..671	nap				7..185	0.85	g23132 04	31	87	0.12	F21J9. 24 [Arabi dopsis thalia na] (AE000 533) H. pylori predic ted coding region HP0119 [Helic obacte r pylori 26695]
173969	ATU035 909	ATL8S1 0820:1 ..439	nap				ATL8S1 0820:1 61..31 3	0.85	g34026 97	31	987	2.9e- 98	(AC004 261) putati ve phosph atidyl inosit ol-4- phosph ate 5- kinase [Arabi dopsis thalia na] (AC005 896) putati ve white
173970	ATU035 910	ATL8C1 9853:2 234..1 251	nap				ATL8C1 9853:2 185..1 251	0.85	g40564 89	31	858	1.8e- 68	
							ATL8C9 403:68 7..636	0.85					

173971	ATU035 911	ATL8C2 2363:3 836..7 77	nap					ATL8C2 2363:2 963..7 77	0.85	g24594 19	31	169	4.0e- 13	prote n [Arabi dopsis thalia na] (AC002 332) hypoth etical protei n [Arabi dopsis thalia na]
173972	ATU035 912	ATL8C4 9906:1 ..1068	nap					ATL8C4 9906:4 40..10 62	0.85	g35823 20	31	178	6.0e- 16	(AC005 496) hypoth etical protei n [Arabi dopsis thalia na]
173973	ATU035 913	ATL8C1 2762:1 ..1003	nap					ATL8C1 2762:7 6..539	0.85	g28946 06	31	604	7.4e- 57	(AL021 889) putati ve protei n [Arabi dopsis thalia na]
173974	ATU035 914	ATL8C3 4021:1 752..1	nap					ATL8C3 4021:1 752..2 73	0.85	g36953 87	31	725	5.2e- 64	(AF096 371) contai ns

173975	ATU035 915	ATL8C5 869:26 84..1	nap							ATL8C5 869:26 84..60	0.85	g44553 67	31	1425		similarity to replication protein A1 [Arabidopsis thaliana]
173976	ATU035 916	ATL8C3 0132:2 350..7 25	nap							ATL8C3 0132:2 176..1 244	0.84	g44328 66	31	2012	9.5e-189	(AL035524) putative protein [Arabidopsis thaliana]
173977	ATU035 917	ATL8C3 3509:1 48..34 65	nap							ATL8C3 3509:1 48..19 91, ATL8C3 3509:3	0.84, 0.71	g46894 54	31	569	9.8e-48	(AC006267) putative polyprotein

173978	ATU035 918	ATL8C3 5151:3 49..10 34	nap				204..2 923	0.84	g29245 07	31	240	2.6e- 09	[Arabi dopsis thalia na] (AL022 023) cyclop hilin- like protei n [Arabi dopsis thalia na]
173979	ATU035 919	ATL8C4 2168:1 587..1 01	nap				ATL8C4 2168:1 353..1 01	0.84	g22862 00	31	938	4.1e- 87	(AF010 578) polynu cleoti de phosph orylas e [Pisum sativu m]
173980	ATU035 920	ATL8C4 0618:1 473..1	nap				ATL8C4 0618:1 440..3 4	0.84	g30368 16	31	224	7.1e- 10	(AL022 373) myosin -like protei n [Arabi dopsis thalia na]
173981	ATU035 921	ATL8C6 262:29 7..953	nap				ATL8C6 262:30 4..898	0.83	g29824 40	31	620	9.2e- 64	(AL022 224) terpen e

173982	ATU035 922	ATL8C2 9007:1 178..1	nap				ATL8C2 9007:1 005..1 15	0.83	g30634 63	31	1258	4.9e- 126	cyclase like protein [Arabi dopsis thalia na]
173983	ATU035 923	ATL8S2 6354:1 ..381	nap				ATL8S2 6354:8 0..381	0.83	g34200 50	31	610		(AC004 680) hypoth etical protein [Arabi dopsis thalia na]
173984	ATU035 924	ATL8C1 4948:7 82..74	nap				ATL8C1 4948:5 15..74	0.83	g32693 00	31	163	1.3e- 09	(AL030 978) putative protein [Arabi dopsis thalia na]
173985	ATU035 925	ATL8C6 878:1. .1121	nap				ATL8C6 878:26 9..107 5	0.82	g43887 19	31	615	1.0e- 27	(AC006 413) putative protein

173986	ATU035 926	ATL8C3 8932:1 15..18 05	nap					ATL8C3 8932:1 84..17 27	0.82	g39140 02	31	915	1.3e- 70	myosin -like protei n [Arabi dopsis thalia na]
173987	ATU035 927	ATL8C4 058:13 40..37 7	nap					ATL8C4 058:11 65..38 0	0.82	g48368 72	31	930	6.8e- 68	(AC007 260) lcl pr t_seq No defini tion line found [Arabi dopsis thalia na]
173988	ATU035 928	ATL8S2 9647:4 50..1	nap					ATL8S2 9647:4 05..7	0.82	g11850 0	31	320	2.1e- 28	ALDEHY DE DEHYDR OGENAS E [Pseud

173989	ATU035 929	ATL8C1 4560:1 022..8	nap					ATL8C1 4560:8 90..8	0.81	g22449 63	31	124	6.5e- 16	(Z9734 0) hypoth etical protei n [Arabi dopsis thalia na]
173990	ATU035 930	ATL8C1 9416:1 ..2099	nap					ATL8C1 9416:8 02..89 7	0.81	g33866 14	31	78	0.0002 1	(AC004 665) putati ve transc riptio n factor SF3 [Arabi dopsis thalia na]
173991	ATU035 931	ATL8C1 2214:2 055..1 564	nap					ATL8C1 2214:1 948..1 564	0.81	g36680 87	31	269	1.1e- 12	(AC004 667) hypoth etical protei n [Arabi dopsis thalia na]
173992	ATU035 932	ATL8S1 1756:1 ..465	nap					ATL8S1 1756:2 77..37 4	0.80	g20985 75	31	132	3.3e- 15	(AC002 115) F25451 2

173993	ATU035 933	ATL8C3 1892:6 0..139 7	nap					ATL8C3 1892:6 0..136 7	0.80	g30212 85	31	318	2.2e- 30	[Homo sapien s] (AL022 347) hypoth etical protei n [Arabi dopsis thalia na]
173994	ATU035 934	ATL8C2 4299:1 833..1	nap					ATL8C2 4299:1 833..2 38	0.80	g22448 98	31	245	7.7e- 19	(Z9733 8) strong simila rity to protei n phosph atase 2A regula tory chain, 74K [Arabi dopsis thalia na]
173995	ATU035 935	ATL8C2 3866:5 04..97 8	nap					ATL8C2 3866:5 04..93 3	0.80	g33778 45	31	75	0.0021	(AF076 274) contai ns simila rity to the basic

173998	ATU035 938	ATL8S1 246:61 1..1	nap				ATL8S1 246:55 7..190	0.78	g15458 71	31	638	4.3e- 67	na] (U6660 7) cyclin type B-like [Zea mays]
173999	ATU035 939	ATL8C5 0234:1 ..615	nap				ATL8C5 0234:1 62..53 4	0.78	g21941 27	31	990	8.8e- 92	(AC002 062) Strong simila rity to Arabid opsis recept or- like protei n kinase (gb AT LECGEN E) and F20P5. 16. [Arabi dopsis thalia na]
174000	ATU035 940	ATL8C4 0522:1 ..166	nap				ATL8C4 0522:6 3..166	0.78	g32427 01	31	204	1.6e- 17	(AC003 040) hypothe tical protei n [Arabi dopsis thalia

174001	ATU035 941	ATL8S3 203:57 7..1	nap				ATL8S3 203:48 9..39	0.78	g23144 36	31	408	9.5e- 35	na] (AE000 631) NADH- ubiqui none oxidor educta se, NQO12 subuni t (NQO12) [Helic obacte r pylori 26695]
174002	ATU035 942	ATL8C8 853:79 8..1	nap				ATL8C8 853:75 6..709	0.78	g46783 83	31	98	7.4e- 10	(AL049 656) histon e H2A.F/ Z-like protei n [Arabi dopsis thalia na]
174003	ATU035 943	ATL8C1 0252:8 24..26 17	nap				ATL8C1 0252:8 24..23 00	0.78	g32692 98	31	1462		(AL030 978) myosin heavy chain - like protei n [Arabi

[illegible]

174004	ATU035 944	ATL8C6 162:53 6..1	nap				ATL8C6 162:51 5..82	0.77		g38797 58	31	181	6.6e- 15	(Z8022 0) Simila rity to yeast protei n TREMBL ID E24689 5); CDNA EST EMBL:T 00018 comes from this gene; CDNA EST EMBL:C 13908 comes from this gene; CDNA EST EMBL:C 11656 comes from this gene; CDNA	dopsis thalia nal
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174005	ATU035 945	ATL8C2 8397:1 ..659	nap					ATL8C2 8397:7 5..576	0.77		g48951 86	31	299	4.0e- 18	EST yk234a 5.3 comes from this gene;.. ..[] (AC007 661) putati ve growth regula tor protei n [Arabi dopsis thalia na]
174006	ATU035 946	ATL8C2 7426:3 24..93 5	nap					ATL8C2 7426:3 24..91 7	0.77		g37860 07	31	132		(AC005 499) hypo thetical protei n [Arabi dopsis thalia na]
174007	ATU035 947	ATL8C4 8129:6 64..54 7	nap					ATL8C4 8129:6 64..54 7	0.76		g42637 75	31	108	5.3e- 09	(AC006 068) hypo thetical protei n [Arabi dopsis thalia na]

174008	ATU035 948	ATL8C5 873:18 87..50 3	nap			ATL8C5 873:17 72..50 3	0.76	g43888 29	31	1512	nal (AC006 528) putati ve pol polypr oteins with a Zn- finger CCHC type domain (prosi te:QDO C50158) and a DDE integr ase signat ure motif [Arabi dopsis thalia nal]
174009	ATU035 949	ATL8C1 2326:1 202..8 38	nap			ATL8C1 2326:1 117..8 38	0.76	g48503 83	31	512	7.9e- 50 (AC007 357) Contai ns simila rity to [l]
174010	ATU035 950	ATL8C4 606:84 5..1	nap			ATL8C4 606:64 1..20	0.75	g48503 95	31	860	1.4e- 75 (AC007 357) EST gbIN37 870 comes

174011	ATU035 951	ATL8C4 7515:9 59..12 23	nap						ATL8C4 7515:9 59..11 57	0.75	g30803 66	31	110	9.9e- 05	(AL022 580) putati ve protei n [Arabi dopsis thalia na]	from this gene. [Arabi dopsis thalia na]
174012	ATU035 952	ATL8C2 094:1. .736	nap						ATL8C2 094:72 ..685	0.74	g46789 31	31	629	1.2e- 67	(AL049 711) serine -type carbox ypepti dase like protei n [Arabi dopsis thalia na]	(AL049 711) serine -type carbox ypepti dase like protei n [Arabi dopsis thalia na]
174013	ATU035 953	ATL8C4 4952:1 000..1	nap						ATL8C4 4952:9 24..71 5	0.74	g44172 67	31	938	1.8e- 79	(AC007 019) hypothe tical protei n [Arabi dopsis thalia na]	(AC007 019) hypothe tical protei n [Arabi dopsis thalia na]

174014	ATU035 954	ATL8C4 32:262 2..255	nap				ATL8C4 32:260 0..213 4	0.74	g44544 71	31	176	2.4e- 12	(AC006 234) putati ve G protei n couple d recept or [Arabi dopsis thalia na]
174015	ATU035 955	ATL8C8 172:10 35..31	nap				ATL8C8 172:67 4..31	0.74	g42635 43	31	908	5.4e- 68	(AC006 250) putati ve Athila retroee lement ORF1 protei n [Arabi dopsis thalia na]
174016	ATU035 956	ATL8C2 0226:1 ..1614	nap				ATL8C2 0226:2 ..1587	0.74	g42205 29	31	897	3.0e- 65	(AL035 356) putati ve protei n [Arabi dopsis thalia na]
174017	ATU035	ATL8S9	nap				ATL8S9	0.73	g31352	31	126	1.4e-	(AC003

	957	727:35 5..15					727:35 5..15		66				09	058) hypoth etical protei n [Arabi dopsis thalia na]
174018	ATU035 958	ATL8C2 3381:1 ..1645	nap				ATL8C2 3381:1 45..10 88	0.73	g22136 20	31	429	4.0e- 41	(AC000 103) F21J9. 13 [Arabi dopsis thalia na]	
174019	ATU035 959	ATL8C3 2909:1 144..5 3	nap				ATL8C3 2909:6 69..10 5	0.72	g45570 78	31	126	4.4e- 09	(AC007 045) putati ve Tall-1 pol polypr otein, 5, partia l [Arabi dopsis thalia na]	
174020	ATU035 960	ATL8C1 0797:1 ..571	nap				ATL8C1 0797:9 2..523	0.72	g36950 61	31	334	7.7e- 33	(AF064 788) rac GTPase activa ting protei n 2	

174021	ATU035961	ATL8C28734:506..953	nap					ATL8C28734:663..749	0.71			g3785985	31	338	2.0e-19	[Lotus japonicus] (AC005560) hypothetical protein [Arabidopsis thaliana]
174022	ATU035962	ATL8C7402:4286..96	nap					ATL8C7402:4286..96	0.71			g2224639	31	143	1.7e-12	(AB002347) KIAA0349 [Homo sapiens]
174023	ATU035963	ATL8C13076:1..4590	nap					ATL8C13076:1293..4564	0.71			g3643604	31	162	9.3e-05	(AC005395) receptor-like protein kinase [Arabidopsis thaliana]
174024	ATU035964	ATL8C38434:1374..1	nap					ATL8C38434:945..253	0.71			g3482933	31	1119	1.9e-115	(AC003970) Similar to cdc2 protein kinase

174025	ATU035 965	ATL8C4 5624:1 613..1	nap				ATL8C4 5624:1 287..3 37	0.70	g34618 40	31	1427	1.9e- 128	s [Arabi dopsis thalia na] (AC005 315) putati ve revers e transc riptas e [Arabi dopsis thalia na]
174026	ATU035 966	ATL8S7 399:57 0..264	nap				ATL8S7 399:55 4..351	0.70	g32490 74	31	400	3.4e- 31	(AC004 473) Contai ns simila rity to no- apical - merist em (NAM) protei n gb x92 205 from Petuni a hybrid a. [Arabi

174027	ATU035 967	ATL8C1 3693:2 797..1	nap				ATL8C1 3693:2 058..9 2	0.70	g32199 11	31	72	0.0012	PUTATI VE KINESI N-LIKE PROTEI N C2F12. 13 [Schiz osacch aromyc es pombel]	dopsis thalia na]
174028	ATU035 968	ATL8C4 5509:1 ..1217	nap				ATL8C4 5509:4 1..102 3	0.69	g32692 82	31	1461	7.6e- 141	(AL030 978) putati ve, protei n [Arabi dopsis thalia na]	
174029	ATU035 969	ATL8C1 1355:1 ..882	nap				ATL8C1 1355:1 23..77 4	0.69	g39012 94	31	554	2.4e- 42	(AF089 711) rpp8 [Arabi dopsis thalia na]	
174030	ATU035 970	ATL8C2 502:33 61..15 30	nap				ATL8C2 502:33 12..15 30	0.69	g19058 87	31	360	2.2e- 28	(U9246 1) putati ve recomb inatio n	

174031	ATU035 971	ATL8S3 0689:1 ..497	nap					ATL8S3 0689:7 8..457	0.69		g40967 56	31	169	1.2e- 19	factor GdRad5 4 [Gallu s gallus] (U3939 4) alpha- 1,3/4- fucosi dase precur sor [Strep tomyce s sp.]
174032	ATU035 972	ATL8C9 452:84 4..1	nap					ATL8C9 452:58 0..80	0.69		g21467 31	31	93	2.4e- 06	FK506- bindin g protei n - Arabid opsis thalia na [Arabi dopsis thalia na] (AF147 259) No defini tion line found [Arabi dopsis
174033	ATU035 973	ATL8C3 3797:3 28..35 41	nap					ATL8C3 3797:8 20..23 64, ATL8C3 3797:3 535..3 278	0.68, 0.96		g47739 09, g41153 61	31, 31	279, 173	5.3e- 14, 1.1e- 14	(AF147 259) No defini tion line found [Arabi dopsis

174034	ATU035 974	ATL8S1 7049:4 56..1	nap				ATL8S1 7049:2 27..42	0.68	g31278 36	31	178	8.3e- 17	thalia nal; (AC005 957) hypoth etical protei n [Arabi dopsis thalia na]
174035	ATU035 975	ATL8C9 077:1. .923	nap				ATL8C9 077:29 5..876	0.67	g45861 12	31	644		(AL049 638) putati ve protei n [Arabi dopsis thalia na]
174036	ATU035 976	ATL8C3 4350:6 9..122 5	nap				ATL8C3 4350:6 9..117 7	0.67	g24594 26	31	500	2.7e- 29	(AC002 332) putati ve splici ng factor

174037	ATU035 977	ATL8S2 9821:1 ..311	nap						ATL8S2 9821:5 9..290	0.67	g33865 65	31	218	7.9e- 23	(AF079 588) 1-aminocyclopropane-1-carboxylate oxidase [Sorghum bicolor]
174038	ATU035 978	ATL8C3 246:37 2..234 9	nap						ATL8C3 246:37 2..234 9	0.66	g32928 32	31	134	6.7e- 05	(AL031 018) putative protein [Arabis dopsis thaliana]
174039	ATU035 979	ATL8S1 1925:3 89..1	nap						ATL8S1 1925:3 09..24	0.66	g55617 7	31	384	5.5e- 35	(M2262 1) isocitrate lyase [Escherichia coli]

174040	ATU035 980	ATL8C3 0248:1 943..3 913	nap			ATL8C3 0248:3 295..2 294	0.66	g22752 13	31	72	0.81	(AC002 337) hypoth etical protein [Arabi dopsis thalia na]
174041	ATU035 981	ATL8C2 7365:2 392..3 101	nap			ATL8C2 7365:2 392..2 769	0.65	g42630 46	31	289		(AC005 142) hypoth etical protein [Arabi dopsis thalia na]
174042	ATU035 982	ATL8C2 4259:5 129..3 043	nap			ATL8C2 4259:3 461..3 043	0.65	g33778 45	31	303	1.1e- 19	(AF076 274) contains similarity to the basic region plus leucine zipper transcription factor s (Pfam: bZIP.h mm,

174043	ATU035 983	ATL8C1 4972:8 39..39 8	nap						ATL8C1 4972:7 14..39 8	0.64	g32275 3	31	388	1.6e- 23	score: 12.77) [Arabi dopsis thalia na]
															DNA- bindin g protei n B2F - common tobacc o (fragm ent) [Nicot iana tabacu m]
174044	ATU035 984	ATL8C4 006:90 2..144	nap						ATL8C4 006:90 2..144	0.64	g47739 13	31	87	3.9e- 08	(AF147 259) No defini tion line found [Arabi dopsis thalia na]
174045	ATU035 985	ATL8C3 3602:2 95..1	nap						ATL8C3 3602:2 95..15 7	0.64	g31525 63	31	165	1.0e- 13	(AC002 986) Simila r to myb- relate d transc

174046	ATU035 986	ATL8C2 8455:1 080..5 07	nap						ATL8C2 8455:1 038..5 07	0.64	g33416 84	31	124	0.0004 9	(AC003 672) hypothe- tical protein [Arabi- dopsis thalia na]
174047	ATU035 987	ATL8C5 0120:6 26..10 9	nap						ATL8C5 0120:3 79..10 9	0.64	g45672 51	31	225	2.2e- 16	(AC007 070) unknown protein [Arabi- dopsis thalia na]

174048	ATU035 988	ATL8S1 453:34 ..634	nap			ATL8S1 453:85 ..606	0.63	g57529 9	31	143	2.8e- 13	na] (X8227 5) sucros e transp orter [Lycop ersico n escule ntum]
174049	ATU035 989	ATL8S7 784:1. ..616	nap			ATL8S7 784:50 ..616	0.63	g10507 21	31	160	7.9e- 14	(X9240 5) ompR [Neiss eria mening itidis]
174050	ATU035 990	ATL8C1 8156:7 6..628	nap			ATL8C1 8156:4 24..53 1	0.62	g44328 63	31	132	0.97	(AC006 300) putati ve phosph ate/ph osphoe nolpyr uvate transl ocator protei n [Arabi dopsis thalia na]
174051	ATU035 991	ATL8C2 5652:1 ..2239	nap			ATL8C2 5652:3 25..19	0.62	g38742 14	31	681	5.6e- 41	(Z8321 7) Simila

Yeast	(SW:YE	EST	EMBL:D	33757	comes	gene;	EST	EMBL:D	34256	comes	gene;	EST	EMBL:D	37288	comes	from..
E1-E2	DD1 YE	ST	27574	comes	from	gene;	EST	34256	comes	from	gene;	EST	37288	comes	from..	
ATPase		cDNA	comes	from	this	cDNA	EST	comes	from	this	cDNA	EST	comes	from	this	
YEL031		EST	comes	from	this	cDNA	EST	comes	from	this	cDNA	EST	comes	from	this	
W		EST	comes	from	this	cDNA	EST	comes	from	this	cDNA	EST	comes	from	this	

174052	ATU035 992	ATL8S9 371:17 ..583	nap				ATL8S9 371:17 ..560	0.61	g18772 56	31	90	4.8e- 08	(Z9277 0) fadE1 [Mycob acteri um tuberc ulosis]
174053	ATU035 993	ATL8C8 428:48 9..1	nap				ATL8C8 428:48 9..202	0.61	g42205 14	31	394	1.3e- 31	(AL035 356) putati ve protei n [Arabi dopsis thalia na]
174054	ATU035 994	ATL8C3 6398:1 ..1288	nap				ATL8C3 6398:9 81..64 5	0.60	g44907 07	31	546	7.3e- 55	(AL035 680) putati ve protei n [Arabi dopsis thalia na]
174055	ATU035 995	ATL8C2 6780:1 ..540	nap				ATL8C2 6780:4 7..265	0.60	g27813 57	31	501	2.3e- 50	(AC003 113) F2401. 13 [Arabi dopsis thalia na]
174056	ATU035 996	ATL8C2 6649:1	nap				ATL8C2 6649:2	0.60	g21601 50	31	326	4.0e- 27	(AC000 375)

		..2243					87..22 43							EST gb T43 829 comes from this gene. [Arabi dopsis thalia na]
174057	ATU035 997	ATL8C4 913:22 33..61 5	nap				ATL8C4 913:21 58..70 9	0.60	g49144 03	31	1599	4.7e- 151	(AL050 352) putati ve protei n [Arabi dopsis thalia na]	
174058	ATU035 998	ATL8S1 9217:1 ..628	nap				ATL8S1 9217:2 05..57 0	0.59	g15506 60	31	444	1.8e- 39	(Z8022 6) ptrBa [Mycob acteri um tuberc ulosis]	
174059	ATU035 999	ATL8S2 9820:1 ..576	nap				ATL8S2 9820:9 ..529	0.59	g29110 28	31	266	7.2e- 28	(AL021 958) PE_PGR S [Mycob acteri um tuberc ulosis]	

174060	ATU036 000	ATL8C2 3449:6 63..14 19	nap				ATL8C2 3449:6 90..13 97	0.59	g44163 01	31	906	2.0e- 74	(AF105 716) gag protei n [Zea mays]
174061	ATU036 001	ATL8C4 7286:1 ..1165	nap				ATL8C4 7286:1 17..93 7	0.59	g14048 9	31	173	4.7e- 14	GNS1 PROTEI N [Sacch aromyc es cerevi siae]
174062	ATU036 002	ATL8S4 372:1. .763	nap				ATL8S4 372:17 4..548	0.58	g45389 17	31	18	0.045	(AL049 482) putati ve protei n [Arabi dopsis thalia na]
174063	ATU036 003	ATL8S1 1123:1 ..561	nap				ATL8S1 1123:8 5..516	0.58	g45392 00	31	869	3.3e- 80	(AL049 497) putati ve long chain fatty acid coA ligase [Strep tomyce s coelic olor]

174064	ATU036 004	ATL8C4 7806:1 78..13 56	nap				ATL8C4 7806:1 074..1 300	0.57	g39351 37	31	514	1.3e- 46	(AC005 106) T25N20 .1 [Arabi dopsis thalia nal]
174065	ATU036 005	ATL8C2 37:1.. 1412	nap				ATL8C2 37:376 ..1412	0.56	g43888 18	31	992	2.6e- 102	(AC006 528) putati ve pol polypr oteins with a Zn- finger CCHC type domain (prosi te:QDO C50158) and a DDE integr ase signat ure motif [Arabi dopsis thalia nal]
174066	ATU036 006	ATL8S2 6896:5 63..1	nap				ATL8S2 6896:4 75..12 8	0.56	g41066 05	31	165		(AL031 866) ORF37, len: 639 aa,

174068	ATU036 008	ATL8C1 0281:1 ..1237	nap						ATL8C1 0281:6 5..953	0.55		g45394 63	31	777		act.hm m, score 58.97) [Arabi dopsis thalia na]
174069	ATU036 009	ATL8C3 9275:2 475..1	nap						ATL8C3 9275:2 198..2 1	0.55		g34112 66	31	714	5.4e- 48	(AF080 567) pullul anase- type starch debran ching enzyme [Zea mays]
174070	ATU036 010	ATL8C4 2194:9 70..1	nap						ATL8C4 2194:8 68..33 6	0.55		g33602 89	31	374	5.6e- 25	(AF023 164) leucin e-rich repeat transm embran e protei n kinase

174071	ATU036 011	ATL8S2 2002:1 ..295	nap							ATL8S2 2002:5 9..295	0.55	g13505 74	31	309	1.5e- 28	POSSIB LE REPLIC ATION PROTEI N B [Agrob acteri um tumefa ciens]	1 [Zea mays]
174072	ATU036 012	ATL8C3 2081:8 44..14 85	nap							ATL8C3 2081:8 44..14 37	0.55	g13635 28	31	475	1.5e- 46	gag protei n - maize [Zea mays]	
174073	ATU036 013	ATL8C2 2888:1 ..1633	nap							ATL8C2 2888:1 75..15 47	0.55	g24981 38	31	69	0.45	AMYLOV ORAN BIOSYN THESIS PROTEI N AMSK [Erwin ia amylov ora]	
174074	ATU036 014	ATL8C3 061:62 3..123	nap							ATL8C3 061:62 3..123	0.55	g45803 98	31	504	9.3e- 54	(AC007 171) putati ve protei n kinase APK1A [Arabi dopsis	

174075	ATU036 015	ATL8S1 4696:3 81..1	nap				ATL8S1 4696:3 78..14	0.55	g16661 06	31	128	3.3e- 05	thalia na] (Z8209 8) hypo thetical protein RV3553 [Mycob acteri um tuberc ulosis]
174076	ATU036 016	ATL8C4 8318:5 27..1	nap				ATL8C4 8318:3 18..69	0.55	g48951 95	31	361	1.4e- 25	(AC007 661) putati ve mitoch ondria l carrier family protein [Arabi dopsis thalia na]
174077	ATU036 017	ATL8C2 2565:6 61..25 0	nap				ATL8C2 2565:6 61..25 0	0.55	g29795 59	31	149	1.2e- 11	(AC003 680) putati ve DNA bindin g protein [Arabi

174078	ATU036 018	ATL8C1 997:10 6..785	nap					ATL8C1 997:10 6..785	0.54	g42638 19	31	203	7.4e- 27	dopsis thalia nal (AC006 067) putati ve serpin protei n [Arabi dopsis thalia nal]
174079	ATU036 019	ATL8C1 0594:1 043..2 74	nap					ATL8C1 0594:8 80..31 7	0.54	g21601 73	31	88		(AC000 132) Simila r to N. tabacu m salt- induci ble protei n (gb U0 8285). [Arabi dopsis thalia nal]
174080	ATU036 020	ATL8C2 5753:1 56..28 14	nap					ATL8C2 5753:1 876..2 814	0.54	g28274 8	31	222	2.2e- 20	gene coxII intron 2 protei n - liverw ort

174081	ATU036 021	ATL8C2 2098:1 280..1 690	nap						ATL8C2 2098:1 395..1 690	0.54	g32978 11	31	178	1.6e- 16	(March antia polymo rpha) mitoch ondrio n [March antia polymo rpha] (AL031 032) putati ve peroxi dase [Arabi dopsis thalia na]
174082	ATU036 022	ATL8S2 6072:6 9..473	nap						ATL8S2 6072:6 9..243	0.54	g11639 27	31	113	0.21	(U4370 4) ketore ductas e [Strep tomyce s sp. C5]
174083	ATU036 023	ATL8C4 0443:5 03..1	nap						ATL8C4 0443:5 03..9	0.54	g46783 62	31	507	1.5e- 45	(AL049 659) protei n kinase -like protei n [Arabi dopsis

174087	ATU036 027	ATL8C1 0942:1 ..1699	nap				ATL8C1 0942:6 65..15 14	0.53	g22449 63	31	705	2.6e- 80	na] (Z9734 0) hypoth etical protei n [Arabi dopsis thalia na]
174088	ATU036 028	ATL8C1 1693:9 65..1	nap				ATL8C1 1693:8 87..30 3	0.53	g12971 89	31	1113	1.1e- 114	(U5350 1) Theore tical protei n with simila rity to Swiss- Prot Access ion Number P19456 plasma membra ne ATPase 2 (proto n pump) [Arabi dopsis thalia na]
174089	ATU036 029	ATL8S2 2390:4	nap				ATL8S2 2390:3	0.53	g36601 29	31	419	6.8e- 32	Chain Z,

174091	ATU036 031	ATL8C2 3656:1 909..6 39	nap						ATL8C2 3656:1 852..6 39	0.52	936953 82	31	314	2.3e- 16	[Arabi dopsis thalia na] (AF096 370) contai ns simila rity to Arabid opsis thalia na retrot ranspo son Tall-1 (GB:L4 7193) [Arabi dopsis thalia na]
174092	ATU036 032	ATL8C2 576:74 2..1	nap						ATL8C2 576:74 2..136	0.52	940380 55	31	525	1.3e- 43	(AC005 897) putati ve cytoch rome P450 [Arabi dopsis thalia na]
174093	ATU036 033	ATL8C6 802:1. .977	nap						ATL8C6 802:81 ..923	0.52	929824 52	31	674	4.3e- 69	(AL022 223) recept or

174094	ATU036 034	ATL8S5 682:22 4..538	nap						ATL8S5 682:22 4..503	0.52	g31526 06	31	113	2.3e- 06	(AC004 482) putati ve ring zinc finger protei n [Arabi dopsis thalia na]
174095	ATU036 035	ATL8S2 5829:1 ..444	nap						ATL8S2 5829:6 8..424	0.52	g48205 2	31	197	2.6e- 15	hypoth etical protei n - Escher ichia coli [Esche richia coli]
174096	ATU036 036	ATL8S1 2619:5 73..1	nap						ATL8S1 2619:2 81..8	0.52	g43887 32	31	377	2.5e- 37	(AC006 413) putati ve Athila retro element

174097	ATU036 037	ATL8C3 8653:1 163..1	nap					ATL8C3 8653:9 98..69	0.51	g16576 19	31	144	9.8e- 12	ORF 2 prote n [Arabi dopsis thalia nal] (U7250 4) G5p [Arabi dopsis thalia nal]
174098	ATU036 038	ATL8S1 7495:1 ..567	nap					ATL8S1 7495:3 32..64	0.51	g11682 92	31	334	4.0e- 26	ISOCIT RATE LYASE (ISOCI TRASE) (ISOCI TRATAS E) (ICL) [Mycob acteri um leprae]
174099	ATU036 039	ATL8S9 717:47 ..424	nap					ATL8S9 717:47 ..405	0.50	g25066 68	31	302	9.8e- 15	HYPOTH ETICAL 42.5 KD PROTEI N IN UXAB- MARR INTERG ENIC REGION [Esche richia

174100	ATU036 040	ATL8C1 992:30 3..1	nap				ATL8C1 992:30 0..18	0.50	g23985 25	31	227	4.3e- 14	coli (Y1372 2) Transc ription factor [Arabi dopsis thalia na]
174101	ATU036 041	ATL8C1 977:3 34..23 98	nap				ATL8C1 977:3 34..23 17	0.49	g47339 73	31	973	5.4e- 59	(AC007 264) hypoth etical protei n [Arabi dopsis thalia na]
174102	ATU036 042	ATL8C1 884:1 882..2 60	nap				ATL8C1 884:1 707..2 60	0.49	g42635 43	31	1373	2.9e- 141	(AC006 250) putati ve Athila retroe lement ORF1 protei n [Arabi dopsis thalia na]
174103	ATU036 043	ATL8S1 8650:6 07..1	nap				ATL8S1 8650:3 22..16	0.49	g16806 86	31	458	1.2e- 42	(U5133 0) rust resist ance

174104	ATU036 044	ATL8C4 1098:9 91..1	nap					ATL8C4 1098:7 08..56 5	0.49	g36458 99	31	1239	2.9e- 110	kinase Lr10 [Triti cum aestiv um] (U6840 8) 5' end not determ ined experi mental ly [Zea mays]
174105	ATU036 045	ATL8S2 3176:5 29..13 4	nap					ATL8S2 3176:3 85..20 8	0.49	g42204 53	31	293	1.3e- 28	(AC006 216) Simila r to [Arabi dopsis thalia na]
174106	ATU036 046	ATL8C6 26:62. .2312	nap					ATL8C6 26:64. .2216	0.49	g45443 72	31	1627	4.1e- 181	(AC006 920) putati ve revers e transc riptas e [Arabi dopsis thalia na]
174107	ATU036 047	ATL8C4 5557:1	nap					ATL8C4 5557:1	0.48	g25058 76	31	250	3.0e- 10	(Y1277 6)

174108	ATU036 048	589..7 41	nap				426..7 41	0.47	g30045 51	31	141	3.5e- 10	MYB- related protein [Arabidopsis thaliana] (AC003673) hypothetical protein [Arabidopsis thaliana]
174109	ATU036 049	ATL8C1 5172:1 ..1346	nap				ATL8C1 0263:7 2..154 4	0.47	g22136 24	31	2362		(AC000103) F21J9.16 [Arabidopsis thaliana]
174110	ATU036 050	ATL8S3 335:48 9..1	nap				ATL8S3 335:37 2..262	0.47	g12375 8	31	237	5.2e- 10	HISTIDINE AMMONIUM- LYASE (HISTIDASE) [Bacillus subtilis]
174111	ATU036 051	ATL8C4 2050:1	nap				ATL8C4 2050:1	0.46	g29247 89	31	807	1.5e- 71	(AC002334)

174112	ATU036 052	..797	nap				85..78 4	0.46	g38757 06	31	986	5.3e- 96	(Z3559 8) Phosph oribos ylform ylglyc inamid ine syntha se; cDNA EST EMBL:D 35229 comes from this gene; cDNA EST EMBL:D 32558 comes from this gene; cDNA EST
							ATL8C3 0598:1 164..7 8						

174113	ATU036 053	ATL8C3 9662:1 ..1605	nap							ATL8C3 9662:6 29..13 19	0.46	g47738 99	31	73	0.0020	EMBL:D 35376 comes from this gene; cDNA EST EMBL:D 34213 comes from this gene; cD... []
174114	ATU036 054	ATL8C3 9332:1 03..19 42	nap							ATL8C3 9332:1 03..17 32	0.46	g31423 03	31	819	1.6e- 72	(AC002 411) Strong simila rity to MRP- like ABC transp orter gb U92 650 from

174117	ATU036 057	ATL8S7 818:35 7..1	nap							ATL8S7 818:35 7..26	0.42	g17999 18	31	93	3.7e- 06	dopsis thalia nal (D9088 1) PENICI LLIN- BINDIN G PROTEI N 1A (PBP- 1A). [Esche richia colii]
174118	ATU036 058	ATL8S3 516:1. .459	nap							ATL8S3 516:10 3..393	0.42	g23152 27	31	404	7.1e- 19	(Z9826 0) hypoth etical protei n Rv1226 c [Mycob acteri um tuberc ulosis]
174119	ATU036 059	ATL8C3 3376:7 23..1	nap							ATL8C3 3376:6 49..93	0.42	g22450 09	31	761	3.3e- 77	(Z9734 1) hypoth etical protei n [Arabi dopsis thalia nal]

174120	ATU036 060	ATL8C3 6847:2 4..479	nap				ATL8C3 6847:1 81..39 2	0.42	g32583 94	31	131	1.7e- 12	(AP000 007) 483aa long hypoth etical protei n [Pyroc occus horiko shii]
174121	ATU036 061	ATL8C1 6992:7 03..1	nap				ATL8C1 6992:3 61..30 5	0.41	g23426 89	31	130	0.0004 5	(AC000 106) Simila r to Beta integr al membra ne protei n (gb U4 3629). [Arabi dopsis thalia na]
174122	ATU036 062	ATL8C1 103:26 46..1	nap				ATL8C1 103:24 15..50	0.41	g44328 07	31	1434	2.9e- 79	(AC006 570) putati ve polypr oteins [Arabi dopsis thalia na]
174123	ATU036	ATL8S9	nap				ATL8S9	0.41	g41581	31	257	1.6e-	(AL035

063	914:1. .545					914:43 1..15	87				23	206) putati ve aldehy de dehydr ogenas e [Strep tomyce s coelic olor]
174124	ATU036 064	ATL8C4 8147:1 71..60 5	nap			ATL8C4 8147:1 71..56 3	0.41	g28276 48	31	559	6.4e- 58	(AL021 637) putati ve protei n [Arabi dopsis thalia nal]
174125	ATU036 065	ATL8S7 171:43 2..1	nap			ATL8S7 171:42 6..31	0.41	g28322 44	31	557	3.1e- 48	(AF031 569) hypoth etical protei n [Zea mays]
174126	ATU036 066	ATL8S2 9579:5 77..1	nap			ATL8S2 9579:4 17..11 8	0.40	g45393 01	31	505	2.5e- 47	(AL049 480) putati ve mitoch ondria l protei n

174127	ATU036 067	ATL8C2 9932:7 67..12 7	nap					ATL8C2 9932:7 67..12 7	0.40	g48039 60	31	278	3.5e- 27	[Arabi dopsis thalia nal] (AC006 202) putati ve carbon ic anhydr ase [Arabi dopsis thalia nal]
174128	ATU036 068	ATL8C2 3418:2 285..1 908	nap							g11969 98	31	602	7.2e- 56	(J0182 9) unknow n protei n [Trans poson Tn10]
174129	ATU036 069	ATL8S1 1474:1 ..530	nap							g17032 27	31	367	8.3e- 36	ALANIN E AMINOT RANSFE RASE 2 (GPT) (GLUTA MIC-- PYRUVI C TRANSA MINASE 2) (GLUTA MIC--

174136	ATU036 076	ATL8S3 0794:1 ..555	nap							g58474 8	31	153	1.1e- 13	transf erase [Capsi cum chinen se]
														AUTOLY SIN (N- ACETYL MURAMO YL-L- ALANIN E AMIDAS E) [Strep tococc us faecal is]
174137	ATU036 077	ATL8S1 408:13 1..373	nap							g38692 76	31	99	7.5e- 06	(AF053 764) NADP- depend ent mannit ol dehydr ogenas e [Agari cus bispor us]
174138	ATU036 078	ATL8C1 2836:4 20..10 30	nap							g43357 64	31	723	6.0e- 41	(AC006 284) putati ve WRKY

174139	ATU036 079	ATL8S2 5171:1 ..227	nap									g10632 3	31	118	2.6e- 05	hypoth etical protei n (L1H 5, region) - human []	DNA- bindin g protei n [Arabi dopsis thalia na]
174140	ATU036 080	ATL8S2 4380:5 52..1	nap									g36953 95	31	452	2.8e- 49	(AF096 372) contai ns simi larity to revers e trans criptas e (Pfam: PF0007 8 rvt, E=4.3e -08) [Arabi dopsis thalia na]	
174141	ATU036	ATL8C4	nap									g43097	31	475	4.2e-	(AC006	

174142	ATU036 082	ATL8S2 5632:1 ..461	nap									g36953 96	31	429	2.9e- 30	(AF096 372) contai ns simila rity to Arabid opsis thalia na retrot ranspo son Athila (GB:X8 1801) [Arabi dopsis thalia na]
174143	ATU036 083	ATL8S3 0546:1 ..466	nap									g40564 86	31	295	3.3e- 26	(AC005 896) hypo thetical protei n [Arabi dopsis na]

174148	ATU036 088	ATL8C4 0432:2 14..48 9	nap							g43143 68	31	211	5.3e- 10	Petunia PttA2 protein (GB:AF 037337) [Arabidopsis thaliana na]
174149	ATU036 089	ATL8C2 7562:8 87..1	nap							g45570 78	31	887		(AC007 045) putative Ta11-1 polyprotein, 5', partial [Arabidopsis thaliana na]
174150	ATU036 090	ATL8S2 5122:1 ..588	nap							g37243 17	31	444	1.5e- 40	(AB012 956) probab

174151	ATU036 091	ATL8C2 6240:1 ..504	nap										g49030 18	31	253	3.9e- 28	(AB027 507) ACE [Arabi dopsis thalia nal]	le aspara gine synthe tase [Vibri o. choler ae]
174152	ATU036 092	ATL8S1 4831:4 60..1	nap										g17090 72	31	282	1.0e- 26	PUTATI VE MOLYBD ENUM TRANSP ORT ATP- BINDIN G PROTEI N MODF (PHOTO REPAIR PROTEI N PHRA) [Esche richia colil]	
174153	ATU036 093	ATL8S2 0162:4 88..1	nap										g42048 96	31	622	8.0e- 59	(U5710 0) erythr itol kinase	

174154	ATU036 094	ATL8S2 9689:1 ..525	nap										g23814 94	31	578	6.2e- 50	[Bruce lla abortu s] (AB005 589) Srw1 [Schiz osacch aromyc es pombel] (AC007 584) unknow n protei n [Arabi dopsis thalia na]
174155	ATU036 095	ATL8C3 1601:5 29..1	nap										g49143 81	31	558	3.1e- 57	(U2957 9) sulfit e reduct ase (NADPH) flavop rotein beta subuni t [Esche richia coli]
174156	ATU036 096	ATL8S2 9622:1 ..546	nap										g88265 7	31	421	4.4e- 35	(AF032 903)
174157	ATU036 097	ATL8S1 729:34	nap										g26423 28	31	110	1.8e- 06	

[illegible]

174158	ATU036 098	ATL8S2 961:19 6..491	nap							31	99	0.015	(AC006 592) putati ve revers e transc riptas e [Arabi dopsis thalia nal]	imidaz olone- 5- propio nate hydrol ase; HutI protei n homolo g [Sinor hizobi um melilo ti]
174159	ATU036 099	ATL8C3 9282:6 02..36 6	nap							31	100	2.8e- 06	(AL049 640) putati ve protei n [Arabi dopsis thalia nal]	imidaz olone- 5- propio nate hydrol ase; HutI protei n homolo g [Sinor hizobi um melilo ti]

174160	ATU036 100	ATL8C3 0842:1 536..9 60	nap									g46782 09	31	717	2.0e- 61	(AC007 134) putati ve sugar transp orter [Arabi dopsis thalia na]
174161	ATU036 101	ATL8C5 333:60 1..353	nap									g48352 36	31	135	1.9e- 12	(AL049 862) putati ve protei n [Arabi dopsis thalia na]
174162	ATU036 102	ATL8S2 7518:4 56..1	nap									g44552 50	31	146	2.3e- 06	(AL035 523) putati ve protei n [Arabi dopsis thalia na]
174163	ATU036 103	ATL8S4 51:196 ..533	nap									g13505 76	31	176	7.1e- 12	PEPTID E CHAIN RELEASE E FACTOR 1 (RF- 1) [Coxie

174164	ATU036 104	ATL8C4 7184:1 277..1 503	nap										g48039 60	31	180	1.7e- 15	lla burnet ii] (AC006 202) putati ve carbon ic anhydr ase [Arabi dopsis thalia na]
174165	ATU036 105	ATL8S1 6929:2 37..1	nap										g32928 34	31	211		(AL031 018) putati ve protei n [Arabi dopsis thalia na]
174166	ATU036 106	ATL8C1 6639:3 02..1	nap										g33778 55	31	324	3.2e- 30	(AF076 274) contai ns simila rity to revers e trancr iptase (Pfam: rvt.hm m, score:

174167	ATU036 107	ATL8S2 893:1. .334	nap									g44163 03	31	399	3.9e- 16	(AF105 716) gag protei n [Zea mays]	96.80) and CCHC- type zinc finger s (Pfam: zf- CCHC.h mm, score: 14.43) [Arabi dopsis thalia na]
174168	ATU036 108	ATL8S1 5468:1 ..661	nap									g47339 85	31	80	0.0007 6	(AC007 209) hypoth etical protei n, 5' partia l [Arabi dopsis thalia na]	
174169	ATU036 109	ATL8C1 0632:2 144..3 633	nap									g44328 07	31	1112		(AC006 570) putati ve	

174170	ATU036 110	ATL8S1 1662:1 ..568	nap									g40990 90	31	432	3.6e- 42	polypr oteins [Arabi dopsis thalia na]
174171	ATU036 111	ATL8S1 3545:1 ..550	nap									g99755	31	623	1.4e- 60	(U8317 8) unknown [Arabi dopsis thalia na]
174172	ATU036 112	ATL8C3 3963:6 289..5 445	nap									g32528 17	31	415		RNA- direct ed DNA polyme rase (EC 2.7.7. 49) - Arabid opsis thalia na retro transpo son Tat-1 (fragm ent) [Arabi dopsis thalia na]. (AC004 705) putati ve

	116	22:486 ..307								66				14	897) hypoth etical protei n [Arabi dopsis thalia nal]
174177	ATU036 117	ATL8S1 5495:1 68..45 4	nap							g33351 71	31	118	1.2e- 06	(AF067 858) embryo - specif ic protei n 3 [Arabi dopsis thalia nal]	
174178	ATU036 118	ATL8S9 260:1. .380	nap							g29823 11	31	27	0.041	(AF051 240) probab le ubiqui tin- conjug ating enzyme E2 [Picea marian a]	
174179	ATU036 119	ATL8C3 9443:6 34..51 4	nap							g46512 04	31	175	2.4e- 14	(AB026 262) ring finger protei n	

174184	ATU036 124	ATL8S5 083:53 0..335	nap										g22449 20	31	161	8.6e- 14	(Z9733 9) hypoth etical protei n [Arabi dopsis thalia na]
174185	ATU036 125	ATL8C1 3191:8 08..1	nap										g45570 78	31	492	2.4e- 47	(AC007 045) putati ve Tall-1 pol polypr oteins, 5', partia l [Arabi dopsis thalia na]
174186	ATU036 126	ATL8C4 6410:4 22..1	nap										g45127 13	31	324	3.4e- 32	(AC006 569) hypoth etical protei n [Arabi dopsis thalia na]

174191	ATU036 131	ATL8C3 7394:7 21..1	nap										g45845 39	31	1029		al membra ne protei n (gb U4 3629). [Arabi dopsis thalia na]
174192	ATU036 132	ATL8S2 1841:5 67..14 3	nap										g39534 71	31	544	6.8e- 53	(AC002 328) F2202. 16 [Arabi dopsis thalia na]
174193	ATU036 133	ATL8C4 9517:5 55..1	nap										g21905 59	31	128	0.0093	(AC001 229) F5114. 16 [Arabi dopsis thalia na]
174194	ATU036 134	ATL8C2 903:1.	nap										g46512 02	31	514	7.9e- 49	(AB026 253)

174202	ATU036 142	ATL8C7 59:340 3..187 9	nap							g44328 07	31	1093	4.9e- 101	(AC006 570) putati ve polypr otein [Arabi dopsis thalia naj	beet [Beta vulgar is]
174203	ATU036 143	ATL8S1 3485:7 62..1	nap							g24975 36	31	114	2.7e- 14	PYRUA TE KINASE , MUSCLE ISOZYM E (CYTOS OLIC THYROI D HORMON E BINDIN G PROTEI N) (CTHBP) [Xenop us laevis]	
174204	ATU036 144	ATL8S2 5833:1 ..257	nap							g45126 21	31	410	3.2e- 39	(AC004 793) F28K20	

174211	ATU036 151	ATL8C4 2989:3 474..3 868	nap										g30471 18	31	149	1.5e- 07	(AF058 919) No defini tion line found [Arabi dopsis thalia na]	protei n [Arabi dopsis thalia na]
174212	ATU036 152	ATL8C3 1636:5 93..93 9	nap										g44159 10	31	481	3.8e- 25	(AC006 282) hypoth etical protei n [Arabi dopsis thalia na]	hypoth etical protei n [Arabi dopsis thalia na]
174213	ATU036 153	ATL8C8 247:15 40..33 2	nap										g49143 61	31	1211	1.1e- 139	(AC007 289) putati ve revers e transc riptase [Arabi dopsis thalia na]	putati ve revers e transc riptase [Arabi dopsis thalia na]

174214	ATU036 154	ATL8C4 296:84 6..573	nap							g24627 58	31	449	3.5e- 43	(AC002 292) putati ve RNA- bindin g protei n [Arabi dopsis thalia nal]
174215	ATU036 155	ATL8C1 2571:3 09..1	nap							g13340 9	31	356	3.1e- 32	DNA- DIRECT ED RNA POLYME RASE ALPHA CHAIN [Nicot iana tabacu m]
174216	ATU036 156	ATL8S3 1029:4 85..27 6	nap							g42630 50	31	247	2.7e- 22	(AC005 142) putati ve noduli n [Arabi dopsis thalia nal]
174217	ATU036 157	ATL8C2 5150:1 040..1 611	nap							g30634 53	31	582	3.5e- 46	(AC003 981) F22013 .15 [Arabi dopsis thalia nal]

168	700:12 88..1									20							113	248) putati ve revers e transc riptions e Tal- 1 [Arabi dopsis thalia na]
174229	ATU036 169	ATL8C6 570:12 79..15 52	nap							g16524 34	31	210					1.4e- 14	(D9090 5) N- acetyl glutam ate kinase [Synec hocyst is sp.]
174230	ATU036 170	ATL8C2 042:1. .729	nap							g45811 64	31	986					1.4e- 98	(AC006 220) putati ve polypr oteins [Arabi dopsis thalia na]
174231	ATU036 171	ATL8C2 1316:5 95..1	nap							g21941 38	31	728					1.4e- 34	(AC002 062) Simila r to Arabid opsis recept

174232	ATU036 172	ATL8C3 6203:6 416..5 020	nap							g44552 03	31	252	3.0e- 18	or- like protei n kinase precu sor (gb M8 4659). [Arabi dopsis thalia na]
174233	ATU036 173	ATL8C5 00:187 0..237 3	nap							g23158 6	31	399	8.7e- 29	ATP SYNTA SE BETA CHAIN, MITOCH ONDRIA L PRECUR SOR [Hevea brasil iensis]
174234	ATU036 174	ATL8C1 4152:4 13..1	nap							g35598 05	31	353	2.1e- 18	(AJ006 787) putati

174235	ATU036 175	ATL8C4 5101:1 840..2 344	nap									g42635 45	31	592	1.5e- 47	(AC006 250) putati ve Athila retroee lement ORF1 protei n [Arabi dopsis thalia na]
174236	ATU036 176	ATL8C8 762:1. .985	nap									g44163 02	31	1564	6.4e- 161	(AF105 716) copia- type pol polypr otein [Zea mays]
174237	ATU036 177	ATL8S2 2527:1 ..458	nap									g38509 82	31	241	5.6e- 05	(AF060 431) ATP syntha se beta subuni

174238	ATU036 178	ATL8S1 9072:5 08..1	nap										g44172 86	31	234	3.0e- 12	(AC007 019) putati ve shikim ate kinase [Arabi dopsis thalia na]	t [Steno carpus salign us]
174239	ATU036 179	ATL8C8 756:10 51..23 2	nap										g44163 01	31	1224	1.9e- 126	(AF105 716) gag protei n [Zea mays]	
174240	ATU036 180	ATL8C2 853:58 8..1	nap										g31641 32	31	542	3.8e- 53	(D7860 1) cytoch rome P450 monoox ygenase [Arabi dopsis thalia na]	
174241	ATU036 181	ATL8C8 754:11 28..1	nap										g29613 74	31	755	4.2e- 57	(AL022 141) putati ve diseases	

174242	ATU036 182	ATL8C1 6490:2 0..722	nap									g48862 88	31	87	0.11	(AL050 300) putati ve protei n [Arabi dopsis thalia na]	e resist ance protei n [Arabi dopsis thalia na]
174243	ATU036 183	ATL8C2 1073:1 ..701	nap									g36680 95	31	113	1.3e- 07	(AC004 667) hypoth etical protei n [Arabi dopsis thalia na]	(AC004 667) hypoth etical protei n [Arabi dopsis thalia na]
174244	ATU036 184	ATL8S2 0267:1 ..501	nap									g30938 02	31	341	5.2e- 21	(AF051 897) sterol carrie r protei n X [Oryct olagus cunicu lus]	(AF051 897) sterol carrie r protei n X [Oryct olagus cunicu lus]

174245	ATU036 185	ATL8C9 578:18 66..14 20	nap							945126 52	31	431	8.5e- 14	(AC007 048) hypoth etical protei n [Arabi dopsis thalia na].
174246	ATU036 186	ATL8C3 678:12 76..21	nap							945726 74	31	230	3.5e- 23	(AC006 954) unknow n protei n [Arabi dopsis thalia na].
174247	ATU036 187	ATL8S1 0065:5 59..1	nap							g11508 34	31	88	0.89	(U4247 1) Wiscot t- Aldric h Syndro me protei n homolo g [Mus muscul us].
174248	ATU036 188	ATL8C2 3769:1 414..1	nap							946801 79	31	512	2.1e- 54	(AF111 709) polypr otein [Oryza

174252	ATU036 192	ATL8S8 757:41 3..1	nap									g43357 38	31	615	5.1e- 31	na] (AC006 248) putati ve revers e transc riptas e [Arabi dopsis thalia na]
174253	ATU036 193	ATL8C3 9683:5 207..7 034	nap									g44327 94	31	714	1.2e- 55	(AC006 437) putati ve Tnp2 Tam1 transp oson protei n [Arabi dopsis thalia na]
174254	ATU036 194	ATL8C3 5668:1 323..5 67	nap									g26606 62	31	236	4.2e- 23	(AC002 342) simila r to maize transp oson MuDR mudrA protei n, 3' partia

174255	ATU036 195	ATL8S4 373:1. .504	nap										g43097 56	31	526	1.3e- 50	(AC006 217) putati ve transp osase [Arabi dopsis thalia na]
174256	ATU036 196	ATL8C4 7680:1 ..269	nap										g41917 92	31	100	1.3e- 05	(AC005 917) hypoth etical protei n [Arabi dopsis thalia na]
174257	ATU036 197	ATL8C1 3509:1 498..1 19	nap										g34618 39	31	834	2.0e- 87	(AC005 315) putati ve recept or protei n kinase [Arabi dopsis thalia na]
174258	ATU036 198	ATL8C1 5087:1	nap										g33193 43	31	704	6.8e- 67	(AF077 407)

174265	ATU036 205	ATL8S2 4218:1 ..130	nap							g14028 1	31	101	8.7e- 07	HYPOTH ETICAL 16.8 KD PROTEI N (ORF 143) [Glyci ne max]
174266	ATU036 206	ATL8C1 6812:1 ..616	nap							g38596 00	31	701	6.5e- 71	(AF104 919) T15B16 .6 gene produc t [Arabi dopsis thalia na]
174267	ATU036 207	ATL8S2 0331:1 ..310	nap							g42108 23	31	107	0.16	(AJ223 604) inti1 [Pseud omonas aerugi nosa]
174268	ATU036 208	ATL8C1 6138:5 59..26 3	nap							g42180 08	31	144	8.5e- 14	(AC006 135) hypoth etical protei n [Arabi dopsis thalia na]
174269	ATU036 209	ATL8C9 237:11	nap							g23471 90	31	176		(AC002 338)

174270	ATU036 210	90..1	nap	ATL8C4 2904:5 64..1	ATL8C4 2904:5 33..12 3	0.99	g31766 91	30	291	2.4e- 29	Na/H antipo rter isolog [Arabi dopsis thalia na] (AC003 671) Contai ns homolo gy to serine /threo nine protei n kinase gb X99 618 from Mycoba cteriu m tuberc ulosis ESTs gb F14 403, gb F14 404, and gb N96 730 come from this
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174271	ATU036 211	ATL8S2 5384:1 ..461	nap					ATL8S2 5384:3 ..461	0.99	g16216 53	30	126	2.0e- 10	U7316 0) fatty acid desatu rase [Droso phila melano gaster]	gene. [Arabi dopsis thalia na]
174272	ATU036 212	ATL8S3 0669:5 27..15 4	nap					ATL8S3 0669:4 95..15 4	0.98	g28326 71	30	326	1.2e- 32	(AL021 712) hypoth etical protei n [Arabi dopsis thalia na]	
174273	ATU036 213	ATL8C3 6426:1 145..4 88	nap					ATL8C3 6426:1 097..5 36	0.98	g33553 08	30	343	5.6e- 34	(AJ009 695) wall- associ ated kinase 4 [Arabi dopsis thalia na]	
174274	ATU036 214	ATL8S8 768:94 ..468	nap					ATL8S8 768:13 2..431	0.98	g16661 15	30	181	2.9e- 18	(Z8209 8) hypoth	

174275	ATU036 215	ATL8C1 2381:1 ..1102	nap						0.98	g38106 76	30	917	1.4e- 90	etical protei n Rv3545 C [Mycob acteri um. tuberc ulosis]
174276	ATU036 216	ATL8S1 4117:1 ..537	nap						0.98	g49030 18	30	315	3.4e- 11	(AJ223 357) SKOR [Arabi dopsis thalia na]
174277	ATU036 217	ATL8C3 3129:1 036..1	nap						0.98	g95725 1	30	379	2.2e- 22	(AB027 507) ACE [Arabi dopsis thalia na] (S7741 8) oxidor educta se requir ed for shoot apex develo pment= FEY [Arabi dopsis thalia

174278	ATU036 218	ATL8C3 5081:7 11..11 99	nap				ATL8C3 5081:7 11..11 57	0.97	g45835 50	30	88	0.13	nal (AJ010 873) KCO- like protei n 3 [Arabi dopsis thalia nal]
174279	ATU036 219	ATL8C2 5025:6 90..1	nap				ATL8C2 5025:4 50..15 6	0.97	g22526 32	30	136	2.9e- 07	(U9597 3) Barley Mlo protei n isolog [Arabi dopsis thalia nal]
174280	ATU036 220	ATL8C1 4908:1 ..643	nap				ATL8C1 4908:1 40..28 9	0.97	g50942 5	30	488	4.8e- 30	(Z3158 9) cyclin 3a [Arabi dopsis thalia nal]
174281	ATU036 221	ATL8S1 4569:1 ..450	nap				ATL8S1 4569:1 10..40 3	0.96	g40334 31	30	596	3.8e- 59	PROBAB LE PYRUVA TE KINASE , CYTOSO LIC ISOZYM E (PK)

174282	ATU036 222	ATL8C9 177:16 3..934	nap						ATL8C9 177:16 3..934	0.96	g45875 50	30	149	[Arabi dopsis thalia nal (AC006 577) EST gb R64 848 comes from this gene. [Arabi dopsis thalia nal (AE001 274) DDI1; L3169. 2 [Leish mania major]
174283	ATU036 223	ATL8C2 4763:1 146..1	nap						ATL8C2 4763:9 99..15 7	0.96	g24291 18	30	145	(AE001 274) DDI1; L3169. 2 [Leish mania major]
174284	ATU036 224	ATL8C4 4314:3 622..4 482	nap						ATL8C4 4314:4 393..4 261	0.95	g32490 90	30	417	(AC004 473) Contai ns simila rity to CUC2 protei n gb 194 4131 from A. thalia

174289	ATU036 229	68	ATL8C1 3872:5 81..1	nap					ATL8C1 3872:5 30..23 4	0.95	g42204 55	30	756	2.6e- 69	(AC006 216) Identical to gene gb D88 746 AR791 from Arabid opsis thalia na. [Arabi dopsis thalia na]	finger protei n [Horde um vulgar el]
174290	ATU036 230	ATL8S1 5623:4 69..1	ATL8S1 5623:4 69..52	nap					ATL8S1 5623:4 69..52	0.94	g67814	30	489	9.3e- 48	H+- transp orting ATP syntha se (EC 3.6.1. 34) alpha chain - Escher ichia coli []	H+- transp orting ATP syntha se (EC 3.6.1. 34) alpha chain - Escher ichia coli []
174291	ATU036	ATL8S3	ATL8S3	nap					ATL8S3	0.94	g26626	30	468	4.3e-	(AF036	

174292	231	0192:1 ..516					0192:4 4..490	12				45	701) simila r to the peptid ase family M1 (zinc metall oprote ases) [Caeno rhabdi tis elegan s]
	ATU036 232	ATL8C3 4733:6 31..10 80	nap				ATL8C3 4733:6 31..99 0	0.94	g29567 83	30	168	4.0e- 14	(AL022 103) mannos e-6- phosph ate isomer ase [Schiz osacch aromyc es pombel]
174293	ATU036 233	ATL8C7 893:13 49..1	nap				ATL8C7 893:13 49..79	0.94	g48369 17	30	537	7.3e- 51	(AC007 153) 80099 [Arabi dopsis thalia na]
174294	ATU036 234	ATL8C6 10:1.. 759	nap				ATL8C6 10:112 ..415	0.94	g42205 23	30	318	7.5e- 26	(AL035 356) putati

174295	ATU036 235	ATL8C2 5547:1 ..672	nap					ATL8C2 5547:5 27..67 2	0.94		g36680 82	30	237	3.5e- 23	ve alliin lyase [Arabi dopsis thalia na] (AC004 667) putati ve DAL1 protei n [Arabi dopsis thalia na]
174296	ATU036 236	ATL8C1 502:10 20..1	nap					ATL8C1 502:96 9..480	0.94		g40383 52	30	306	2.4e- 29	(AF098 951) breast cancer resist ance protei n [Homo sapien s]
174297	ATU036 237	ATL8S1 3735:1 ..368	nap					ATL8S1 3735:6 4..338	0.93		g44551 87	30	367	2.7e- 22	(AI035 521) hypoth etical protei n [Arabi dopsis thalia na]
174298	ATU036	ATL8C3	nap					ATL8C3	0.93		g31352	30	1021	6.7e-	(AC003)

238	0627:6 59..20 50					0627:6 59..16 86	68				88	058) putati ve RNA- bindin g protei n [Arabi dopsis thalia na]
174299	ATU036 239	ATL8C2 4296:1 ..634	nap			ATL8C2 4296:6 1..518	0.92	g42042 72	30	807	4.3e- 88	(AC005 223) Hypoth etical protei n [Arabi dopsis thalia na]
174300	ATU036 240	ATL8S2 9223:1 36..1	nap			ATL8S2 9223:1 33..14	0.92	g13177 2	30	167	3.0e- 14	40S RIBOSO MAL PROTEI N S14 (CLONE MCH1) []
174301	ATU036 241	ATL8C1 3406:1 ..265	nap			ATL8C1 3406:6 8..257	0.92	g33229 32	30	233	1.1e- 18	(AE001 238) protei n- methio nine- S- oxide reduct ase

174302	ATU036 242	ATL8C3 6876:4 767:..4 311	nap					ATL8C3 6876:4 719:..4 329	0.92	g34260 40	30	221	4.9e- 14	(msrA) [Trepo nema pallid um] (AC005 168) hypoth etical protei n [Arabi dopsis thalia na]
174303	ATU036 243	ATL8C3 1618:1 ..1133	nap					ATL8C3 1618:7 9:..113 3	0.92	g45393 14	30	326	1.8e- 27	(AL035 679) kinesi n like protei n [Arabi dopsis thalia na]
174304	ATU036 244	ATL8C2 0430:7 84:..47	nap					ATL8C2 0430:5 27:..17 6	0.92	g45725 69	30	135	5.9e- 11	(AJ133 789) alpha- glucos idase [Alicy clobac illus acidoc aldari us]
174305	ATU036 245	ATL8C1 3187:1 ..1695	nap					ATL8C1 3187:7 2:..151 2	0.92	g49268 25	30	291	2.4e- 12	(AC004 135) T17H7. 10

174306	ATU036 246	ATL8S4 440:56 3..1	nap						ATL8S4 440:37 7..139	0.92	g37023 29	30	259	0.0002 4	[Arabi dopsis thalia na] (AC005 397) hypo- thetical protein [Arabi dopsis thalia na]
174307	ATU036 247	ATL8C2 3685:1 026..4 51	nap						ATL8C2 3685:1 026..4 51	0.91	g48951 86	30	370	1.3e- 37	(AC007 661) putative growth regula- tor protein [Arabi dopsis thalia na]
174308	ATU036 248	ATL8C3 2291:7 82..16 07	nap						ATL8C3 2291:7 82..11 78	0.91	g46789 31	30	283	1.0e- 18	(AL049 711) serine- type carbox- ypepti- dase like protein [Arabi dopsis thalia na]

174309	ATU036 249	ATL8C7 174:1. .821	nap			ATL8C7 174:47 .786	0.91	g46801 80	30	686	4.8e- 70	na] (AF111 709) polypr oteins [Oryza sativa subsp. indica)
174310	ATU036 250	ATL8C1 1485:2 251..4 4	nap			ATL8C1 1485:2 251..4 4	0.91	g11693 72	30	134	0.82	DNAJ PROTEI N (HSP40) [Staph ylococ cus aureus)
174311	ATU036 251	ATL8C1 4882:6 25..1	nap			ATL8C1 4882:5 20..23 2	0.91	g13620 03	30	446	4.2e- 31	protei n phosph atase 2A B regula tory chain 55K - Arabid opsis thalia na [Arabi dopsis thalia na]
174312	ATU036 252	ATL8C3 6287:7 42..13	nap			ATL8C3 6287:7 45..11	0.91	g28326 77	30	182	8.9e- 15	(AL021 712) hypoth

174313	ATU036 253	49	ATL8S2 2360:1 ..309	nap							49	ATL8S2 2360:7 6..285	0.91	g22089 65	30	387	1.8e- 30	etical protei n [Arabi dopsis thalia na]
																		(Y1052 8) cyanid e insens itive termin al oxidas e [Pseud omonas aerugi nos]
174314	ATU036 254	49	ATL8C4 4044:7 30..1	nap								ATL8C4 4044:7 30..16	0.90	g44907 06	30	316	2.9e- 23	(AI035 680) putati ve protei n [Arabi dopsis thalia na]
174315	ATU036 255		ATL8C5 393:68 6..1	nap								ATL8C5 393:63 6..34	0.90	g37760 25	30	206	2.0e- 22	(AJ010 474) RNA helica se [Arabi dopsis thalia na]

174316	ATU036 256	ATL8S8 907:1. .604	nap				ATL8S8 907:93 ..566	0.90	g37575 28	30	420	3.1e- 46	(AC005 167) putati ve import in [Arabi dopsis thalia na]
174317	ATU036 257	ATL8S2 3128:1 ..711	nap				ATL8S2 3128:1 11..70 9	0.90	g32572 74	30	188	9.0e- 16	(AP000 003) 642aa long hypoeth etical protei n [Pyroc occus horiko shii]
174318	ATU036 258	ATL8C3 7363:1 259..1	nap				ATL8C3 7363:6 39..34 3	0.90	g22448 99	30	123		(Z9733 8) simila r to UFD1 protei n [Arabi dopsis thalia na]
174319	ATU036 259	ATL8C4 0183:1 ..717	nap				ATL8C4 0183:5 9..717	0.90	g34209 82	30	114	1.6e- 07	(Z9762 8) Simila rity to Brugia peptid

174320	ATU036 260	ATL8C3 1647:1 ..369	nap					ATL8C3 1647:5 4..369	0.89	g47339 60	30	278	2.1e- 12	ylprol yl isomer ase (TR:G9 84562) [Caeno rhabdi tis elegan s]
174321	ATU036 261	ATL8C3 3479:5 9..260 2	nap					ATL8C3 3479:5 9..635 ATL8C3 3479:1 194..2 602	0.89, 0.80	g41153 65	30	585	3.7e- 62	(AC005 957) revers e transc riptas e-like protei n [Arabi dopsis thalia nal]
174322	ATU036 262	ATL8C3 7484:1 ..2128	nap					ATL8C3 7484:8 2..206 9	0.89	g44159 26	30	1061		(AC006 282) unknow n

174323	ATU036 263	ATL8C3 5750:1 ..1068	nap							ATL8C3 5750:4 91..89 6	0.89	g45672 50	30	51	0.0088	(AC007 070) hypoth etical protei n [Arabi dopsis thalia na]
174324	ATU036 264	ATL8C1 2266:6 42..1	nap							ATL8C1 2266:6 42..14	0.88	g46331 27	30	288	1.7e- 24	(AF110 134) GISA [Volvo x carter i f. nagari ensis]
174325	ATU036 265	ATL8C3 2973:7 97..1	nap							ATL8C3 2973:7 97..29	0.88	g45859 98	30	785	6.5e- 78	(AC005 287) Hypoth etical protei n [Arabi dopsis thalia na]
174326	ATU036 266	ATL8S1 7008:1 ..532	nap							ATL8S1 7008:1 14..49 7	0.87	g17239 03	30	80	0.022	HYPOTH ETICAL 72.0 KD PROTEI

174327	ATU036 267	ATL8C2 5802:1 83..11 00	nap					ATL8C2 5802:1 83..10 71	0.87	g48369 31	30	736	1.4e- 50	N IN TAF60- G4P1 INTERG ENIC REGION [Sacch aromyc es cerevi siae]
174328	ATU036 268	ATL8C4 9138:9 19..20 47	nap					ATL8C4 9138:9 29..17 88	0.87	g44552 75	30	585	1.5e- 62	(AC006 085) Hypoth etical protei n [Arabi dopsis thalia na]
174329	ATU036 269	ATL8S3 0816:5 26..29	nap					ATL8S3 0816:4 75..31 7	0.86	g42042 82	30	547	1.4e- 55	(AL035 527) putati ve protei n [Arabi dopsis thalia na]
														(AC004 146) Hypoth etical protei n [Arabi dopsis thalia

174330	ATU036 270	ATL8C4 4109:1 324..1	nap				ATL8C4 4109:1 259..6 7	0.86	g30804 26	30	96	1.4e- 10	(AL022 604) putati ve protei n [Arabi dopsis thalia na]
174331	ATU036 271	ATL8C4 9193:2 496..1 337	nap				ATL8C4 9193:2 319..1 337	0.86	g28942 88	30	189	7.0e- 13	(AL021 837) putati ve proteo me subuni t [Schiz osacch aromyc es pombe]
174332	ATU036 272	ATL8C4 4230:1 280..1	nap				ATL8C4 4230:1 144..9 6	0.86	g44067 98	30	1507	1.2e- 153	(AC006 304) putati ve helica se [Arabi dopsis thalia na]
174333	ATU036 273	ATL8C4 0073:6 67..1	nap				ATL8C4 0073:2 24..31	0.86	g29613 85	30	110	4.2e- 09	(AL022 141) putati ve protei n

174334	ATU036 274	ATL8S2 0122:5 35..1	nap				ATL8S2 0122:4 85..74	0.86	g22816 64	30	126	9.0e- 11	[Arabi dopsis thalia na] (AF007 381) unknow n [Flavo bacter ium johnso niae]
174335	ATU036 275	ATL8C2 0386:4 61..96 0	nap				ATL8C2 0386:8 53..78 6	0.86	g48113 2	30	145	0.0087	sucros e transp ort protei n SUC1 - Arabid opsis thalia na [Arabi dopsis thalia na]
174336	ATU036 276	ATL8C4 6532:1 679..1	nap				ATL8C4 6532:1 319..1 78	0.85	g33778 16	30	202	1.5e- 18	(AF076 275) contai ns simila rity to Arabid opsis thalia na retrot

174337	ATU036 277	ATL8C1 0468:1 ..1853	nap				ATL8C1 0468:1 117..4 3	0.85	g28646 18	30	699			ranspo son Athila (GB:X8 1801) [Arabi dopsis thalia nal] (AL021 811) putati ve protei n [Arabi dopsis thalia nal]
174338	ATU036 278	ATL8C3 4703:1 ..1231	nap				ATL8C3 4703:2 33..11 81	0.85	g28797 92	30	236	4.9e- 13		(AL021 813) SPAC23 A1.04c , possib le glycos yl hydrol ase, len:75 6aa, simila r eg. to C. elegan s Q18679 , (586aa

	280	0774:2 059..1 038					0774:1 906..1 434		24			34	018) putati ve protei n [Arabi dopsis thalia na]
174341	ATU036 281	ATL8C2 9223:1 ..707	nap				ATL8C2 9223:6 4..615	0.85	g39245 99	30	139	2.6e- 12	(AF069 442) putati ve oxidor educta se [Arabi dopsis thalia na]
174342	ATU036 282	ATL8S1 40:1.. 258	nap				ATL8S1 40:74. .258	0.84	g22450 87	30	157	0.0036	(Z9734 3) hypoth etical protei n [Arabi dopsis thalia na]
174343	ATU036 283	ATL8C4 0195:1 379..1	nap			✓	ATL8C4 0195:1 235..1 00	0.84	g26558 88	30	999	1.3e- 93	(AL009 171) 62D9.a [Droso phila melano gaster]
174344	ATU036 284	ATL8C4 9822:2	nap				ATL8C4 9822:2	0.83	g45859 95	30	190	2.5e- 24	(AC005 287)

174345	ATU036 285	945..1 907	nap				755..1 956	0.83	g42637 79	30	234	1.5e- 22	(AC006 068) hypoth etical protein [Arabi dopsis thalia na]
174346	ATU036 286	ATL8S3 0404:4 51..55	nap				ATL8S2 4663:3 61..18 0	0.83	g45858 82	30	375	1.9e- 37	(AC005 850) PSI type III chloro phyll a/b- bindin g protein [Arabi dopsis thalia na]
174347	ATU036 287	ATL8S1 6896:5 71..1	nap				ATL8S1 6896:5 34..8	0.83	g42638 32	30	265	1.8e- 11	(AC006 067) putati ve splice osomal

174348	ATU036 288	ATL8C5 762:16 87..33 76	nap					ATL8C5 762:20 54..33 76	0.83	g45443 72	30	957		associated protein [Arabi dopsis thalia na]
174349	ATU036 289	ATL8C5 378:1. .1544	nap					ATL8C5 378:25 8..116 6	0.82	g38853 34	30	829	4.4e- 54	(AC006 920) putati ve revers e transc riptas e [Arabi dopsis thalia na]
174350	ATU036 290	ATL8S1 0110:1 ..807	nap					ATL8S1 0110:5 ..735	0.82	g16798 82	30	244	5.4e- 26	(AC005 623) putati ve argona ute protei n [Arabi dopsis thalia na]
														(L3548 4) acetyl glutam ate syntha se

174351	ATU036 291	ATL8C3 5390:7 597..8 338	nap					ATL8C3 5390:7 597..8 269	0.82	g42261 15	30	131	8.6e- 06	[Neuro spora crassa] (AF125 455) No defini tion line found [Caeno rhabdi tis elegan s]
174352	ATU036 292	ATL8C1 6931:4 225..3 252	nap					ATL8C1 6931:3 920..3 252	0.82	g45860 22	30	707	4.5e- 40	(AC007 170) hypoth etical protei n [Arabi dopsis thalia na]
174353	ATU036 293	ATL8S2 8326:1 ..532	nap					ATL8S2 8326:4 8..404	0.81	g31835 41	30	381	9.0e- 30	PYRUVA TE KINASE (PK) (VEGET ATIVE PROTEI N 17) (VEG17) [Bacil lus subtil is]

174354	ATU036 294	ATL8C1 5151:1 ..952	nap				ATL8C1 5151:1 22..95 2	0.81	g45444 22	30	508	7.9e- 32	(AC006 955) putati ve fimbri n [Arabi dopsis thalia na]
174355	ATU036 295	ATL8S7 149:50 9..1	nap				ATL8S7 149:35 7..95	0.80	g41853 10	30	476	1.2e- 39	(AF090 446) gag protei n [Zea mays]
174356	ATU036 296	ATL8C3 5590:1 ..1965	nap				ATL8C3 5590:1 071..1 558	0.80	g45586 59	30	958	2.3e- 62	(AC007 063) unknow n protei n [Arabi dopsis thalia na]
174357	ATU036 297	ATL8C1 4370:9 06..1	nap				ATL8C1 4370:9 06..51 3	0.80	g43245 97	30	392	2.4e- 22	(AF106 324) sodium proton exchan ger Nhxl [Arabi dopsis thalia na]
174358	ATU036 298	ATL8S1 4258:1	nap				ATL8S1 4258:3	0.80	g37383 15	30	131	0.0001 4	(AC005 170)

174359	ATU036 299	..602	nap				10..41 7	0.80	g48357 67	30	183	3.8e- 15	unknown protein [Arabidopsis thaliana]
174360	ATU036 300	ATL8C1 6876:1 ..1244	nap				ATL8C1 6876:9 43..10 56	0.79	g44163 01	30	1020		(AC007 202) T8K14. 16 [Arabidopsis thaliana]
174361	ATU036 301	ATL8C1 9747:5 32..22 0	nap				ATL8C4 3410:5 38..37	0.78	g48502 85	30	308	8.7e- 32	(AF105 716) gag protein [Zea mays]
174362	ATU036 302	ATL8C2 0767:1 241..1	nap				ATL8C2 0767:1 057..1 50	0.77	g27087 43	30	1106	4.6e- 114	(AL049 876) putative protein [Arabidopsis thaliana]
													(AC003 952) putative tail-like revers

174363	ATU036 303	ATL8C3 3443:5 32..1	nap					ATL8C3 3443:5 32..43	0.77	g43887 23	30	490	1.1e- 47	(AC006 413) hypoth etical protein [Arabi dopsis thalia na]
174364	ATU036 304	ATL8C3 9691:1 ..1612	nap					ATL8C3 9691:2 04..12 07	0.77	g43097 67	30	1183	1.3e- 119	(AC006 217) putati ve Athila retro element ORF1 protein [Arabi dopsis thalia na]
174365	ATU036 305	ATL8S1 5171:1 ..549	nap					ATL8S1 5171:3 8..294	0.77	g26684 83	30	68	0.013	(D7837 4) integr ase [Pseud omonas aerugi nosa]

174366	ATU036 306	ATL8S2 9874:1 ..451	nap				ATL8S2 9874:4 7..443	0.76	g34510 75	30	63	3.1e- 06	(AL031 326) putati ve protei n [Arabi dopsis thalia nal]
174367	ATU036 307	ATL8S2 7613:1 ..519	nap				ATL8S2 7613:9 4..286	0.76	g41853 10	30	672	6.0e- 61	(AF090 446) gag protei n [Zea mays]
174368	ATU036 308	ATL8S2 7840:1 ..492	nap				ATL8S2 7840:4 9..440	0.76	g11700 11	30	198	6.4e- 14	UDP-N- ACETYL GLUCOS AMINE- - DOLICH YL- PHOSPH ATE N- ACETYL GLUCOS AMINEP HOSPHO TRANSF ERASE (GPT) (GLPT) (N- ACETYL GLUCOS AMINE- 1- PHOSPH

174372	ATU036 312	ATL8C1 670:29 70..44 8	nap					ATL8C1 670:29 70..44 8	0.76	g30470 62	30	120	9.6e- 10	(AF058 825) No defini tion line found [Arabi dopsis thalia na]
174373	ATU036 313	ATL8C1 8068:1 369..9 93	nap					ATL8C1 8068:1 302..9 93	0.75	g30803 66	30	227	8.0e- 19	(AL022 580) putati ve protei n [Arabi dopsis thalia na]
174374	ATU036 314	ATL8S4 192:51 5..1	nap					ATL8S4 192:35 0..75	0.75	g31531 86	30	394	3.5e- 29	(AF010 180) McpA [Agrob acteri um tumefa ciens]
174375	ATU036 315	ATL8C2 8127:2 04..61 1	nap					ATL8C2 8127:2 04..55 8	0.74	g45393 82	30	255	1.0e- 16	(AL035 526) putati ve protei n [Arabi dopsis

174376	ATU036 316	ATL8S1 8892:5 ..304	nap				ATL8S1 8892:1 47..30	0.74	g58562 4	30	82	1.4e- 07	thalia na] OLIGOP EPTIDE TRANSP ORT ATP- BINDIN G PROTEI N OPFF [Lacto coccus lactis]
174377	ATU036 317	ATL8C1 4639:7 45..1	nap				ATL8C1 4639:6 57..18	0.74	g10013 11	30	210	9.7e- 08	(D6400 6) hypoth etical protei n [Synec hocyst is sp.]
174378	ATU036 318	ATL8C3 1578:1 ..367	nap				ATL8C3 1578:5 4..292	0.73	g46462 04	30	426	4.4e- 43	(AC007 230) T23K8. 7 [Arabi dopsis thalia na]
174379	ATU036 319	ATL8C3 7336:1 ..1741	nap				ATL8C3 7336:8 ..903	0.73	g35137 45	30	2366	2.7e- 169	(AF080 118) contai ns simila rity to

174380	ATU036 320	ATL8C4 383:93 7..217 3	nap					ATL8C4 383:93 7..209 0	0.73	g32362 51	30	596	4.2e- 79	reverse transcriptase (Pfam:rvt.hm m, score: 42.57) [Arabis dopsis thaliana]
174381	ATU036 321	ATL8S2 7298:3 6..391	nap					ATL8S2 7298:5 2..321	0.73	g45444 06	30	232	3.5e- 17	(AC006 955) hypothetical protein [Arabis dopsis thaliana]
174382	ATU036 322	ATL8C2 5784:9	nap					ATL8C2 5784:9	0.73	g45393 96	30	363	6.7e- 28	(AL035 526)

174383	ATU036 323	ATL8C4 4306:1 ..384	nap					51..75	0.73	g28424 93	30	128	1.5e- 11	myb- like protei n [Arabi dopsis thalia na]
								ATL8C4 4306:4 6..384						(AL021 749) predic ted protei n [Arabi dopsis thalia na]
174384	ATU036 324	ATL8C3 5039:1 ..1171	nap					ATL8C3 5039:1 51..10 75	0.73	g46461 96	30	1252	7.2e- 114	(AC007 230) Contai ns simila rity to F13P17 .8 []
														protei n kinase (EC 2.7.1. 37), cAMP- depend ent, cataly tic chain - rat
174385	ATU036 325	ATL8S6 893:1. .380	nap					ATL8S6 893:21 8..329	0.72	g28514 5	30	130		

174386	ATU036 326	ATL8C4 2974:1 ..753	nap					ATL8C4 2974:5 68..75 3	0.72	g48952 24	30	293	5.9e- 29	(fragm ent) [Rattu s norveg icus] (AC007 660) putati ve revers e transc riptas e [Arabi dopsis thalia na]
174387	ATU036 327	ATL8S6 018:1. .629	nap					ATL8S6 018:11 9..418	0.71	g24648 64	30	467	5.1e- 40	(Z9970 7) putati ve protei n [Arabi dopsis thalia na]
174388	ATU036 328	ATL8C3 6183:9 51..23 74	nap					ATL8C3 6183:9 51..23 46	0.71	g26186 99	30	170	5.9e- 08	(AC002 510) unknow n protei n [Arabi dopsis thalia na]
174389	ATU036	ATL8S2	nap					ATL8S2	0.71	g45800	30	95	8.3e-	(AF086

	329	0110:4 61..1					0110:4 51..50		31				09	638) unknown [Pseudomonas putida GB-1]
174390	ATU036 330	ATL8C5 827:1. .784	nap				ATL8C5 827:23 5..751	0.71	g32427 11	30	830			(AC003 040) hypothetical protein [Arabis dopsis thaliana]
174391	ATU036 331	ATL8C4 0066:9 55..1	nap				ATL8C4 0066:7 78..41 0	0.70	g45843 55	30	278		9.8e- 21	(AC006 420) putative Ac-like transposase [Arabis dopsis thaliana]
174392	ATU036 332	ATL8C4 1629:7 70..55	nap				ATL8C4 1629:7 45..55	0.70	g22451 17	30	317		5.4e- 29	(Z9734 3) hypothetical protein [Arabis dopsis thaliana]
174393	ATU036 333	ATL8C2 226:1.	nap				ATL8C2 226:28	0.70	g45103 68	30	263		5.9e- 19	(AC007 017)

174394	ATU036 334	.1315	nap	ATL8C4 5263:1 170..1 943	9..115 8	0.69	g42630 63	30	646	4.1e- 51	putative transcription factor E2F5 [Arabidopsis thaliana]
174395	ATU036 335	ATL8C8 130:33 0..1	nap	ATL8C8 130:33 0..41	ATL8C4 5263:1 226..1 925	0.69	g18903 17	30	353	6.2e- 31	(Y11791) peroxidase ATP26a [Arabidopsis thaliana]
174396	ATU036 336	ATL8S1 8784:4 87..1	nap	ATL8S1 8784:3 79..13 6	ATL8S1 8784:3 79..13 6	0.69	g33677 50	30	126	8.5e- 08	(AL031155) putative amidas [Streptomyces coelic]

174397	ATU036 337	ATL8C3 6955:1 705..1	nap				ATL8C3 6955:1 501..1 23	0.69	g45252 3	30	39	0.095	olor] (D2648 8) This sequen ce is almost identi cal to HUMRSC 433, D13632 .[Homo sapien s]
174398	ATU036 338	ATL8C1 1462:1 ..175	nap				ATL8C1 1462:1 26..22	0.68	g25650 01	30	231	3.1e- 05	(AC002 983) putati ve lipid transf er protei n [Arabi dopsis thalia na]
174399	ATU036 339	ATL8C5 0113:5 584..6 164	nap				ATL8C5 0113:6 116..5 629	0.68	g43712 85	30	503	3.6e- 13	(AC006 260) hypoth etical protei n [Arabi dopsis thalia na]
174400	ATU036	ATL8C7	nap				ATL8C7	0.67	g32490	30	398	2.5e-	(AC004